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Announcements

THE September number will contain a full account of Class Day and Commencement, with reports of addresses, etc. The historical element will be supplied by another instalment of Mr. W. A. Bradley's history of undergraduate publications at Columbia and a contemporary account, edited by Mr. G. B. Germann, of a visitor's impressions of the College in 1787. In connection with the annual list of publications by officers of the University, this number will give a fairly complete summary of all publications issuing from Columbia.

Contents of the Last Two Numbers

DECEMBER, 1899

Graduate Work in the United States	E. D. PERRY
American and Foreign University Training	H. A. TODD
The Faculty of Pure Science and Scientific Societies	R. S. WOODWARD
Statistics of Graduate Schools	G. R. CARPENTER
William Samuel Johnson, LL.D., First President of Columbia College, with Portrait	A. L. JONES
Undergraduate Publications, II	W. A. BRADLEY
Cornellus Vanderbilt, with Portrait	PRESIDENT LOW
Nathan Russell Harrington, with Portrait	BASHFORD DEAN

MARCH, 1900

The Library, <i>with Illustrations</i>	J. H. CANFIELD	
How Books Reach the Shelves	H. B. PRESCOTT	
The Avery Library, <i>Illustrated</i>	RUSSELL STURGIS	
Co-operation with the Public Library	J. S. BILLINGS	
The Study of Dramatic Literature	BRANDER MATTHEWS	
Dorman B. Eaton	J. B. PINE	
A History of Columbia University	H. T. PECK	
Thomas Egleston, E.M., LL.D.	C. F. CHANDLER <i>and</i> <i>with Portrait</i>	C. E. PELLEW

EACH number also contains Editorials, upon matters of current interest; University Notes, recording events of importance in the development of all departments of the University, including contributions from the College of Physicians and Surgeons, Barnard College and Teachers College; Alumni Notes; summaries of the more important University Legislation; and useful collections of Statistics.





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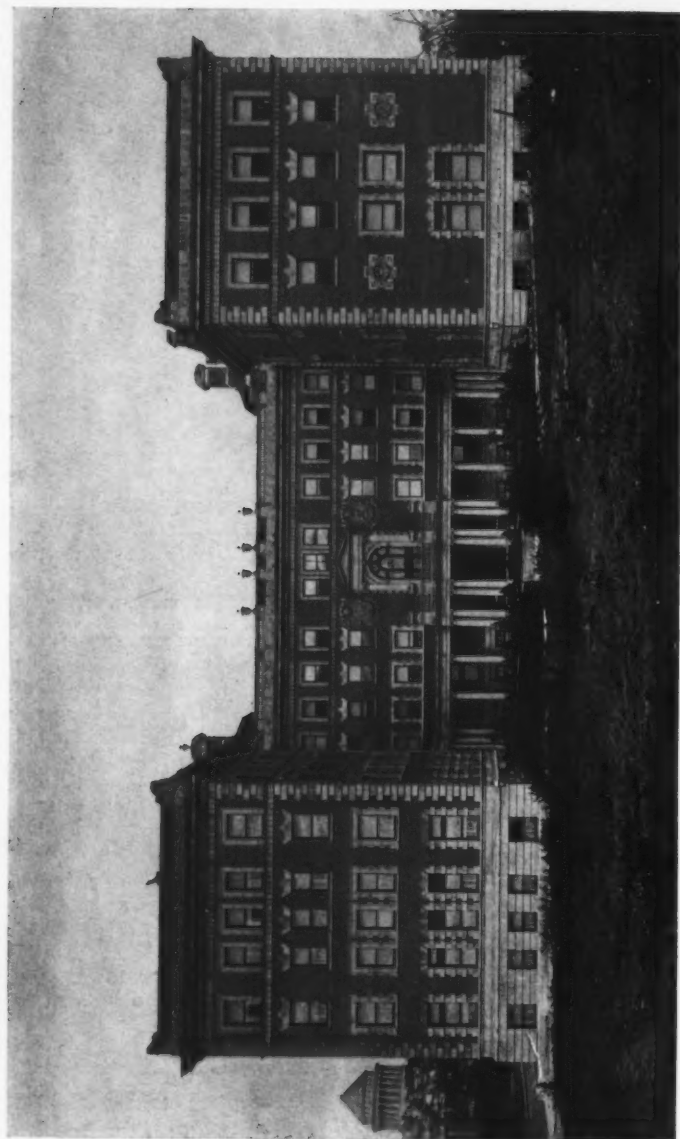
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BARNARD COLLEGE—FROM THE SOUTH

COLUMBIA

UNIVERSITY QUARTERLY

VOL. II—JUNE, 1900—No. 3

THE RISE OF BARNARD COLLEGE

IN 1879, fourteen years after the opening of Vassar and six years after the opening of Girton, the late President Barnard set forth in his annual report some reasons in favor of admitting young women to Columbia College. These reasons, he remarked in his next report, "failed to attract the serious attention of the trustees." Each year, however, he followed them up with fresh arguments, with the history of the advance in women's education in other communities, and with challenges to objectors to show cause why Columbia should not make her resources available to all the youth in her environment.

Uncompromising coeducation was what President Barnard wanted. He objected to isolated colleges for women, because "they cannot, or at least in general will not, give instruction of equal value, though it may be the same in name, with that furnished to young men in the long-established and well-endowed colleges of highest repute in the country." And the affiliated college, of which Girton was at that time the best-known example, seemed to him a cumbrous method of conveying by conduit a stream whose fountainhead should be free to all. He therefore intrepidly complicated one problem with another, and would

have been ready to inaugurate at once a system theoretically unimpeachable, but repulsive to most forms of prejudice existent in the popular mind, in respect to the social, as well as the intellectual, status of women.

To demand the impossible is, of course, one way of recommending a more modest requirement; but President Barnard had no milder measure in his mind. Every year until 1883 he continued to represent to the Trustees and to the public that Columbia was destined to become a university, and that a university merits its name, not merely by providing training for all human faculties, but by putting it at the disposal of all qualified persons. In 1883, many hundreds of citizens resident in New York and the vicinity supported his position by handing to the Trustees a memorial asking for the admission of women to Columbia College on the same terms as men. The Trustees responded by adopting the following resolutions:

Resolved, That this Board declare, as their deliberate and decided opinion, that it is inexpedient to attempt to educate the sexes together at Columbia College.

Resolved, That as to the education of women otherwise than in conjunction with the students of this College, this Board, whatever their opinions may be, are not at present in a condition to provide for it within the College.

Resolved, That this Board deem it expedient to institute measures for raising the standard of female education by proposing courses of study to be pursued outside the College, but under the observation of its authorities, and offering suitable academic honors and distinctions to any who, on examination, shall be found to have pursued such courses of study with success.

Doubtless this action was highly unsatisfactory to the memorialists, nor can it have been encouraging to the President. His ardent wish was to give young women an education; "suitable academic honors" were not his chief desideratum. But the Trustees said, in effect: We are not prepared to educate girls; if, however, they can contrive to educate themselves, we will certify the fact. The President's next report contained no allusion to the ques-

tion, and that for 1884 dealt with it only in a brief paragraph, stating that six women had availed themselves of the privilege offered.

The system thus inaugurated, known as the "Collegiate Course for Women," was attended by a simple and obvious result—it pleased no one. The women found it extremely difficult to obtain outside the college such training as would enable them to pass the college examinations; and the college authorities became reluctant to confer, on the strength of examinations only, degrees which commonly implied daily class-room training as well. Half a dozen women succeeded in taking degrees, and then the system was superseded. It became plain to those interested in the movement that it was necessary to provide an education for the women which should be identical with, or equivalent to, that provided by Columbia for men; and in 1889 Barnard College was organized with this purpose in view. It will be noticed, therefore, that Barnard's relation to Columbia has developed in opposite order to that customary in such cases. Girton and the other English colleges for women began by securing the benefit of instruction by members of the universities with which they were affiliated. The Harvard Annex in this country pursued the same policy. All these colleges are apparently as far as ever from obtaining the degrees of the universities; and the Harvard Annex, by becoming Radcliffe College and undertaking to confer its own degrees, virtually renounced the prospect. On the other hand, in the apparently meagre concession of the third resolution quoted above was contained the root of the whole matter. Once having granted its degrees to women, Columbia has felt obliged to see to it that their value was not impaired; and this feeling has been constantly operative, to the end of giving women the liberal education for which President Barnard strove with so much persistence, chivalry and logic.

In 1889, with the sanction of the Trustees of Columbia, a

provisional charter was granted to Mrs. Francis B. Arnold, the Rev. Dr. Arthur Brooks, Miss Helen Dawes Brown, Silas B. Brownell, Mrs. William C. Brownell, Mrs. Joseph H. Choate, Frederick R. Coudert, Noah Davis, George Hoadley, Hamilton W. Mabie, Mrs. Alfred Meyer, George A. Plimpton, Mrs. John D. Rockefeller, Jacob A. Schiff, Francis Lynde Stetson, Mrs. James S. T. Stranahan, Mrs. James Talcott, the Rev. Dr. Henry Van Dyke, Miss Ella Weed, Everett P. Wheeler, Miss Alice Williams and Mrs. William Wood, constituting them Trustees of Barnard College. Mrs. Alfred Meyer had been one of the students in the Collegiate Course, and her sense of its inadequacy had led her to interest others in an effort to secure genuine college instruction for girls who wanted it. The first chairman of the board, and the man who from the beginning until his death in 1895 was the chief spokesman for Barnard College to the community, was the Rev. Dr. Arthur Brooks. No happier choice could have been made. Dr. Brooks came of scholarly stock; and his love of learning, of fair-play, of freedom for development combined in enthusiastic support of the ideas for which Barnard stands. His talents and his weight with people of many different ways of thinking at once gave a certain prestige to the work. He used to say that in New York a woman could obtain the satisfaction of every want, wish or whim save one: she could not get an education, if she wanted it. Most people have enough personal experience of physical suffering to be able to sympathize with and wish to relieve the misery of the poor; it was Dr. Brooks' special gift to be able to convince people who had never felt it that there is such a thing as hunger and thirst after learning.

The opening of the Harvard Annex in 1881 and of Barnard eight years later was, of course, a manifestation of the growth in this country of the university idea. The generous establishments for women in the Eastern states during the previous twenty years proved, among other things, that

at that time the existing colleges for men were not so far developed that there was any great audacity in trying to duplicate them. In Europe it has never been seriously supposed that Oxford or the University of Berlin could be reproduced for women. Forty years ago it seemed not incredible that Harvard might be so reproduced. But within these forty years the idea of concentrating ability and money in a great university here and there instead of scattering it broadcast, the idea of accumulating great university libraries instead of increasing the number of small collections which duplicate each other without rising above mediocrity, has prevailed with its well-known beneficial effect on American scholarship. In harmony with this idea, Barnard, although in possession of a charter of its own and an administrative autonomy, had the advantage, from the outset, of a close academic connection with Columbia. Instructors at Barnard were chosen from the staff of Columbia or approved by the President thereof. Columbia was responsible for the Barnard examinations, and the papers used at the two colleges were identical, save in a few exceptional cases. Barnard students had equal privileges with Columbia students in the university library. In other words, the women of New York had an opportunity given them to receive precisely the same education as their brothers, to hear the same professors, to use the same books, to share the mental breadth that comes of life in a university as distinguished from a college, and were yet spared as undergraduates the problems that arise from coeducation in the narrow sense.

The caution with which both parties to the experiment advanced, and the liberty left to the various faculties of making their own terms of agreement with Barnard, resulted in a certain heterogeneity of relation. In the undergraduate course the instruction at Barnard was, as far as it went, identical with that at Columbia, though it was given to the women separately at Barnard College during

the first three years. In the senior year a peculiarity of the Columbia system, by which graduate courses are open to election by seniors, took many of the Barnard students into Columbia class rooms. In 1889 the Faculties of Philosophy and Political Science were authorized by the Trustees to open their courses to auditors, who might be either men or women. Auditors, as such, had no right to examination or other official recognition; but Barnard students had all such privileges under this general arrangement between the institutions. The Faculty of Philosophy, which has charge of the departments of philosophy and education, and of the Oriental, Greek, Latin, Germanic, Romance and English languages and literatures, at once used the authority given it by the Trustees and opened a large number of courses to Barnard students. The Faculty of Political Science did not for several years throw open any of its courses to women, and the history of its relation with Barnard is a very interesting phase of the subject. In 1895 Barnard contributed two professors to the common stock. Estimating the number of lectures to be given by them at six hours a week for each, the Faculty furnished Barnard with twelve hours of lectures a week by them and a number of other professors. Both institutions were obviously benefited; for Columbia enlarged its staff and Barnard had the range of a group of specialists, instead of being confined to its own two professors. Three years later a large number of courses at Columbia under this Faculty were opened to women graduate students. This arrangement was of the greatest value, since it opened to women unusual advantages in historical, economic and social study, supplemented by practical work and investigation for which New York offers an exceptional field.

The Faculty of Pure Science received, in 1897, permission to open their courses to auditors, but took no action on it until the following year. In the meantime, an arrangement was made with the department of mathematics similar

to that with the Faculty of Political Science. Barnard contributed one professor to a total of three, and received her share of their services. In the natural sciences, work in chemistry and zoölogy was done at Barnard under Columbia instructors. In physics a special instructor was secured by Barnard. The department of botany was under the charge of the only professor appointed by Barnard who had no connection with Columbia, Professor Emily L. Gregory, Ph.D. In 1898 a large number of lecture-courses under this Faculty were opened to Barnard seniors and graduates.

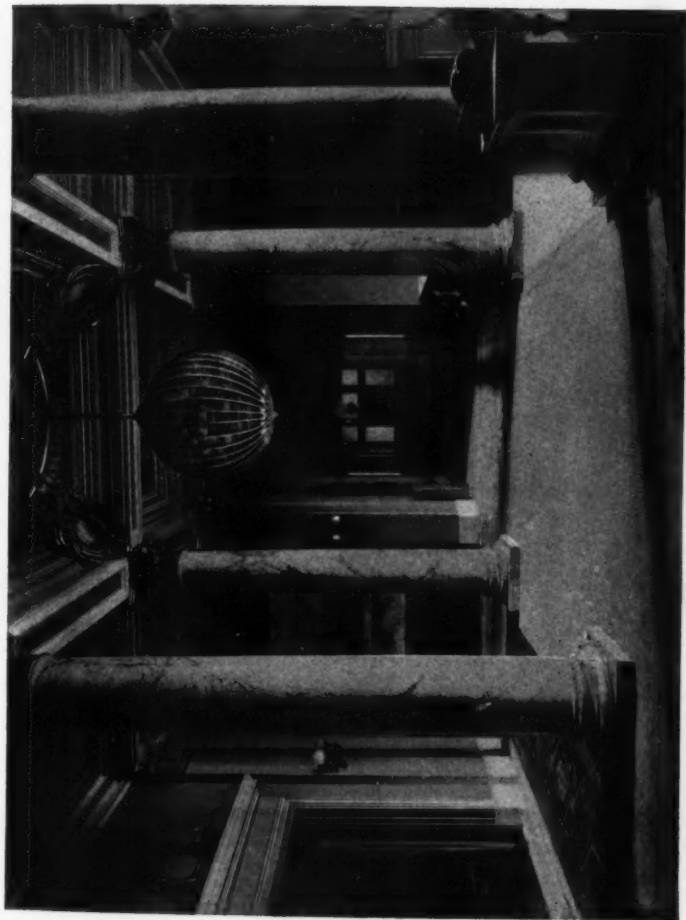
Under all these varying conditions, a uniformity of standard was secured by the fact that Columbia awarded all the degrees and established its own requirements, which had to be met by every department. Special students were admitted only to courses in natural science and political science.

The academic administration of the college was placed in the hands of a committee of the board, whose chairman, Miss Ella Weed, was admirably suited for the work. Her remarkable clearness of view and strength of purpose made her a good director of an experimental enterprise; and she had the fortune to possess, together with sound ideas, the tact requisite to make them prevail. Barnard's problem was two-fold: to recommend itself to Columbia, on the one hand, and to the public, on the other. There was, when Barnard opened, very little provision in New York schools for preparing girls for college, and there were constant requests for a relaxation of the entrance requirements in this or that particular. The new college, moreover, attracted the notice of many women of mature years but with insufficient preliminary training, who were with difficulty made to conceive the nature of college and university work. It needed fortitude on the part of the trustees to insist upon compliance with a rigorous standard, and to be content to see small classes enter, while consider-

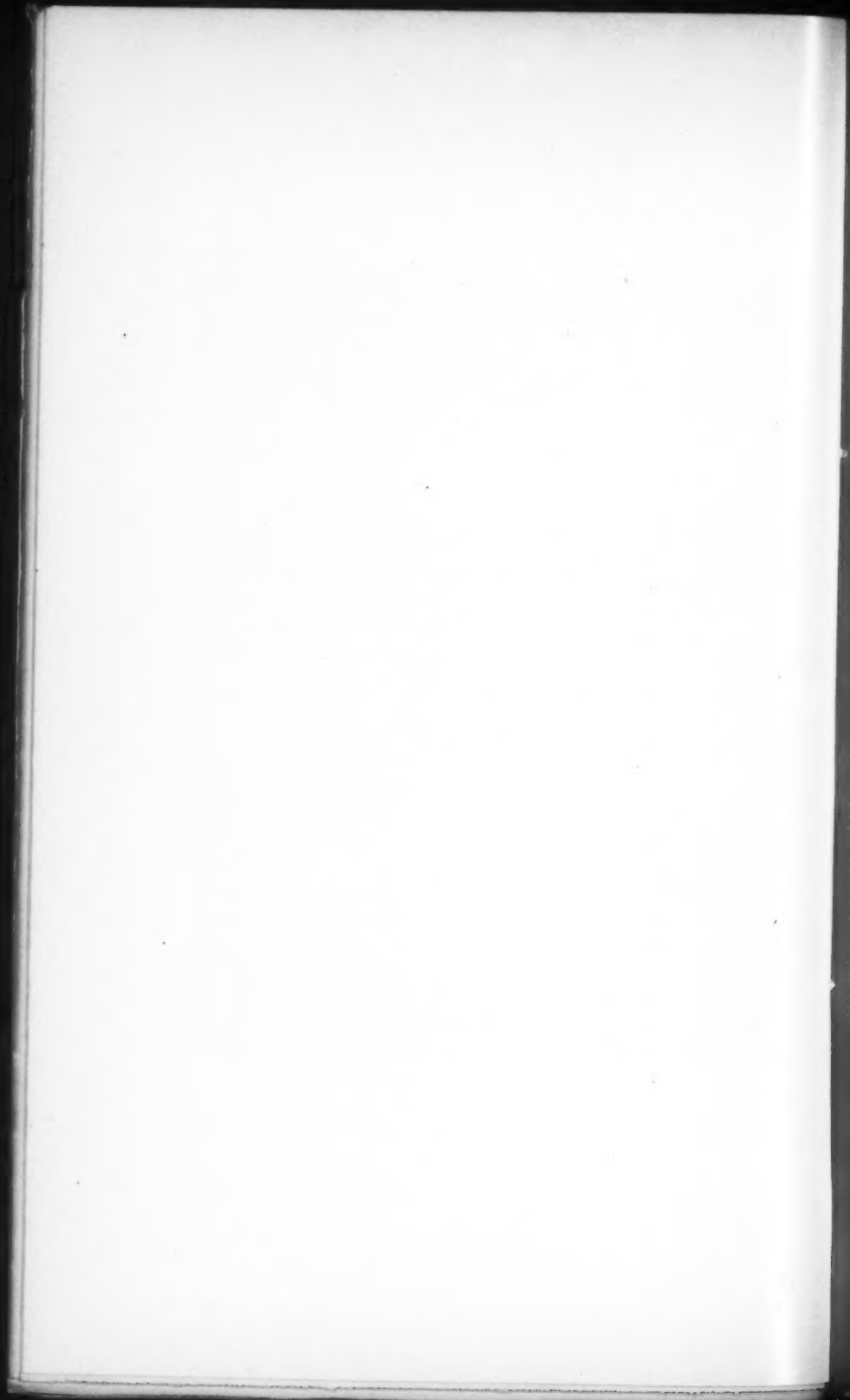
able numbers were turned away. In all these difficulties Miss Weed's ability and temperament were invaluable, and her firmness had much to do with setting the college in a path which has constantly grown smoother, thanks to her initiative. She served as chairman of the academic committee until her death in 1894. In view of the changes necessitated by this loss, the trustees determined to furnish the college with a formal head, and appointed as the first dean Miss Emily James Smith, afterwards Mrs. George Haven Putnam, who served until February 1, 1900.

To meet the first expenses of the College a number of persons pledged themselves to the payment of small annual sums for four years. A house was rented at 343 Madison Avenue, which the College occupied until June, 1897. Seven instructors were selected from the Columbia faculty; fourteen students entered in the School of Arts and twelve as special students in science. In the second year a botanical laboratory was equipped by the generosity of the Torrey Botanical Club. Nine additional instructors were appointed. The entry of each new class during the four years of experiment greatly increased the expenses of the College, as it required an enlargement of the teaching staff which the additional fees were far from meeting. Yet at the end of the four years the College found itself free from debt, with a graduating class of eight, seven juniors, ten sophomores, twenty-seven freshmen and thirty-three special students. It had by this time received \$100,000 from Mrs. Van Wyck Brinckerhoff for a building fund, and five \$5,000 founderships, but was otherwise without income save from students' fees.

In the spring of 1896 the present site was purchased for \$160,000. Before the autumn of 1897 two buildings were completed, namely: Milbank Hall, the gift of Mrs. A. A. Anderson, and Brinckerhoff Hall, paid for chiefly with Mrs. Brinckerhoff's fund. In the following year Fiske Hall was added by the generosity of Mrs. Josiah M. Fiske.



BARNARD COLLEGE—VESTIBULE



In October, 1898, the sum of \$100,000 was given to the College by an anonymous friend and invested as an endowment fund. From time to time funds have been given to found scholarships, amounting altogether to \$38,000. The sum of \$2,400 is paid annually by Columbia in support of the Brooklyn and Curtis scholarships, founded by the Trustees of Columbia in 1895, in recognition of the gift by President Low of a memorial building for the university library. The growth in number of students has kept pace with this material prosperity. Last autumn 312 students matriculated, and of these 77 were graduates.

Barnard's numerical growth has for several years past made inappropriate the informal arrangement for instruction which was the natural method at the outset. Its students form a considerable fraction of the total number of undergraduates under the care of Columbia instructors, and the graduates registered through Barnard have had an appreciable effect upon the university statistics. It became necessary to recognize formally the status which had gradually come into existence, and accordingly an agreement was this year entered into by which Barnard is included in the university system. Its experience in relation to Columbia has differed widely from that of any other affiliated college in relation to its university. Fair-play tempered with generosity has characterized Columbia's attitude from the beginning. The gradual *rapprochement* consummated in the agreement signed last January has proceeded without check. The advance has always been cautious, and therefore no retractions have been necessary. Barnard is an independent college for women, with a corporation and a faculty of its own, vested with all the powers commonly belonging to such bodies. At the same time, it shares the library, the instruction and the degrees of one of the important universities of the world. It is at present the only college in existence of which all these statements can be made.

EMILY JAMES PUTNAM

SOCIAL LIFE AT BARNARD

WITH the passing of 1900, Barnard will lose the last class which spent any part of its undergraduate life in the brown-stone house on Madison Avenue, where the college had few inducements to offer, outside the attainment of knowledge; where it wasn't a deadly insult to be called a "grind"; where the Bursar's office was but too evidently designed by the builder for a back hall-bedroom; and when everybody asked you where Barnard College was anyhow. Future classes will have no remembrance of other buildings less adequate than those upon the Heights; and, judging from the multitude of visitors whom a patient bell-boy continually conducts through the halls, ignorance of the situation of the college must be decreasing daily. So great a change in external conditions is naturally effecting equally striking alterations in the internal affairs of the undergraduate body.

The most important of the innovations is the dormitories. At present, it is true, the preponderating element there is not the undergraduate, but rather the graduate and special student, while Barnard remains dominated by the girl who goes home at night. Whether on the whole this is an evil or not, it is certainly a means by which Barnard draws an interesting class of women. There is still in New York, especially among the older generation, an incredible amount of prejudice against the higher education, and many girls are able to come to Barnard who could never have broken down their parents' opposition to a more distant college. As time goes on, this condition will doubtless change; but as a proof that it now exists may be cited the fact that the government of the dormitories is entirely separate from that of the undergraduates—meaning, of course, the government by the students.

The conduct of the students outside the class room is regulated by the self-government committee, composed of

four members, one elected from each class, with the president of the undergraduate association as chairman. This system, which has worked admirably for a number of years, is now imitated in the government of the dormitories, until the time comes when it will be possible to consolidate the two committees.

The president of the undergraduate association is elected at the spring meeting. She is, of course, a senior of the coming year. The principal requirement demanded by the office is a thorough knowledge of parliamentary law. Among other functions, these meetings are supposed to teach the freshmen how an orderly meeting should be conducted and to serve them, in their ignorance, as models for their own class meetings. The college feels this to be a serious responsibility, and the result of its care is gratifying, for I doubt if there is an assemblage in the country that surpasses the association in attention to parliamentary law, fearlessness of speech and despatch of business.

The other great change that has come is the appearance of a new and valuable element—the girl who has come to college, not for the love of learning, but expecting to amuse herself, following her friends or led by any other motive not wholly scholastic. Without having any wish to discuss the value of the merely social ingredient in any community, I consider this new element useful, not only as providing contrast, but because, if it has not created a life for Barnard outside the class room, it has improved the life that was already there.

Under this influence it has become the custom for each class to give a play during the winter; and as, with increased size of the classes, finances have improved, these plays have grown more and more elaborate. In old times it would have seemed incredible to an actress in one of Mr. Bangs' farces, lightly presented in the back-room in Madison Avenue, that in her own alma mater, within a year or two, an early English drama could be produced

upon a real stage and ended by the descent of a *bona fide* curtain.

There have long been given four teas in the course of the year, one under the auspices of each class, and of late these have grown more and more impressive. Here, often for the first time, upper-classmen inspect the freshmen; here you meet your classmate's relatives and, in a proselyting spirit, attempt to dazzle her little sister with the pleasures of college life; here your professor presents himself, accompanied by his wife and a fixed determination not to talk shop; here, most wonderful of all to those who remember earlier days, comes the Columbia man.

To the new element, too, we owe the athletic association, the 'varsity basket-ball team, the four class teams, the popularity of the gymnasium and the rumor that before long we shall have a boat on the river—as soon, that is to say, as the *alumnæ* shall awake to their duty, roused by the dictum of one to whose words we have been wont to give ear, that the love of danger for itself has been too little encouraged in women.

Not the least important factor in life outside the class room are the fraternities. Since 1891—almost since the foundation of the college—there has been a chapter of Kappa Kappa Gamma at Barnard. In 1898, Kappa Alpha Theta also established a chapter there. Both of these now have rooms in the buildings. Between them they contain some thirty members, or about ten per cent of the total student body.

Barnard has as yet no newspaper or magazine of its own, though it contributes to the editorial staff of two of the Columbia papers—the *Literary Monthly* and the *Morningside*. This state of affairs seems a pity; for, to my mind, there is a great deal of literary ability, and that of a distinctive quality, to draw on. The Barnard girl is not apt to lose her head in enthusiasm over her work, but she comes nearer doing so over her English courses than over

any others. Women are popularly conceived to take criticism, especially in English, as a purely personal matter. But a Barnard girl, even when she returns from a consultation with an essay patterned in red ink, manages to derive pleasure from that excitement. As for the "daily theme" course, it will always remain the delight of its members and the curse of the outsider. Nothing is sacred; your hat, your diction, your anecdote about your maiden aunt—all may serve as copy for the voracious "daily-themer," who finds her mind barren of a subject ten minutes before the class. Yet, in spite of all this, the *Mortarboard* remains the only publication.

The *Mortarboard* is issued every spring by the junior class, and compares most favorably with others of its kind. It is tolerably characteristic of Barnard, inasmuch as it shows a real sense of humor, an excellent feeling for literary forms, especially those metrical, and a commendable ability to mind its own business. It is supposed to be self-supporting and at times has so far exceeded expectation as to bring the class treasury a substantial addition to its revenue. By means of the *Mortarboard* the girls are able to poke a little good-natured fun at their companions and instructors, and, in the same spirit, to offer suggestions concerning existing abuses. Note, for example, the classic brief for argumentation in the '99 *Mortarboard* on the subject, "Should Rhetoric C be Abolished?" 'May a spirit of self-laudation be far from us; but a member of '99 observes with pleasure that Rhetoric C is no longer compulsory. Difficult though it is, we must now imagine a class pursuing its way toward a degree without having recorded its opinion on "Should Capital Punishment be Abolished?" or "Is Cremation preferable to Earth Burial?"—possibly even without need of the friendly counsel of the senior, that if you wish to please the rhetoric department, you must invariably assume the more brutal side of an argument, and show not only that murderers should be put to death, but that their bodies should be speedily cremated.

These terrors, under the elective system, the modern student need not know. One advantage of this system, not probably contemplated by the faculty, is the opportunity it affords the girls to get to know each other; for now you may see juniors, sophomores and freshmen seated together in the same course. This, however, has not had the effect of breaking down class feeling, which is, I think, particularly strong at Barnard. This class feeling is early engendered in the minds of the freshmen, when in the autumn the sophomores initiate them into college life, by the solemn function which since the foundation of the college has been known as "the mysteries." On the whole, however, the relation between the classes is pleasant. *The Mortarboard* expresses the feeling of the college in the matter:

A freshman should always say what's true,
And speak when she is spoken to;
And when she is a Sophomore,
Sport cap and gown—but not before.

Not only is there a great deal of class feeling, but not a little decorum is observed in the treatment of upper-classmen, and the authority of a senior is rarely disputed. Unfortunately, for the last few years, the seniors have been but little at Barnard, since many of the best courses at Columbia have been opened to them. *The Mortarboard* comments on this state of affairs with the light-heartedness of one who has never tried it.

The year before I graduate,
I'll be a senior proud and great,
I'll never come to Barnard then,
But have *my* lessons with the men."

But this process of having your lessons with the men is almost too fraught with exercise to be entirely agreeable. The ten minutes supposed to elapse between lectures may be sufficient when you have only to descend a flight of stairs, but when you have to put on a hat and coat (and possibly a mackintosh and galoshes), walk three blocks

and climb to the top of the Library; when your first professor doesn't hear the bell, and your next professor begins on time, the senior finds it in her heart to envy the unconscious freshmen sauntering arm in arm through the corridors of Barnard.

The only person who meets with a reception of chilling distrust is the "special"—not the meteoric student who is only a special during her first year, because she means to be a junior in her second, but the person of other affairs, who spends three hours a week at college and complains of overwork. The regular undergraduate, with at least fifteen hours a week, doesn't understand her.

Indeed, if it is possible to generalize concerning so heterogeneous a body, I should say that it was typical of Barnard to wish to see everything done decently and in order. Its aim is sanity. Even its friendships are not the less warm for discouraging the over-personal note of intimacy; and through all the changes in its composition and surroundings, Barnard still remains the prophet of common-sense and a sense of humor.

ALICE DUER MILLER

ON THE EDUCATION OF WOMEN

A MEN'S SYMPOSIUM

THE creation for Barnard College of a separate faculty, invested with the usual powers of such a body, invites consideration of the general question, whether the collegiate training of women, so far as it is regulated by authority, should be identical with that of men or not. Thus far the curriculum of Barnard College has been the same as that of Columbia. While the range of elective courses open to the Barnard students has of necessity been somewhat more restricted, it remains true that the requirements for admission and graduation, the examinations and standards of

marking, have been identical in the two colleges. In the main, too, the courses of instruction have been exactly the same and given by the same teachers. Should this continue to be the policy henceforth?

This is, of course, a question for the future—for the newly constituted faculty to deal with as the occasion arises. Meanwhile, it is pertinent and interesting to remark that the new status of our woman's college leaves its faculty with a particularly free hand to solve the problem in the light of pure reason. In institutions where men and women are taught together in the same classes, any differentiation of the curriculum with reference to the sex of students is, of course, impossible. And it is equally impossible where the woman's college is an annex, since in that case anything like a separate and distinct course of study for women would almost certainly become obnoxious to the suspicion of being a concession to feminine weakness. That suspicion, it is rightly felt, must be avoided at all cost. So far as Barnard College is concerned, the most essential part of its policy has been, from the first, to make its degree equal in value to that of Columbia. And its authorities have felt, very naturally, that the surest way to attain that end, and to disarm criticism, was to make its course of study *identical* with that of Columbia.

In these times, however, where large freedom of choice is everywhere the order of the day, it is obvious that equality of educational value need not involve identity of studies. The Procrustean theory is no longer applied to the education of *men*. We recognize practically that all studies are good, when pursued in the right way and in the proper spirit. If it can be shown by conclusive argument that women really need a course of training different from that given to men, there would appear to be no reason why the principle should not in time be frankly recognized at Columbia. The new status of Barnard College, indeed, gives it a unique position among American colleges for women.

As an integral part of a great university, which is known to stand for the highest educational ideals, its reputation is forever assured. It can do that which is best with serene assurance. It has nothing to fear.

The question is, then: What should a woman, *quid* woman, study in the pursuit of a liberal education? Should her course of study differ from that of a man? If so, how? And how early in life should the difference appear? Is it possible in the light of present-day science—say, of psychology, of physiology, of educational history, of social evolution—to reach any conclusions that shall, at least, be valid enough for practical guidance?

In offering a symposium upon this subject the editors of the *QUARTERLY* have wished only to elicit opinions from those who are qualified to discuss it profitably, without prejudice and in a scientific spirit. Since the American movement for the higher education of women began, experience seems to have demonstrated that women *can* do what men can do, and do it just as well—without detriment to their health or to that admirable but elusive essence which Goethe called *das Ewig-weibliche*. So far as concerns the routine work of a college course, the question of capability is no longer on trial in the minds of those who know. With the average aptitude of women for original research and higher scholarship we are not here concerned. Our query is simply, What is best for them in the way of what is called general education?

Having thus stated the question which the *QUARTERLY* was anxious to have illuminated, I turn it over to those who have consented to discuss it, merely remarking that if the results shall prove to be negative,—shall tend, in a word, to the conclusion that there should be no recognition of sex in education,—that too will be instructive.

CALVIN THOMAS

THE solemn arguments which have resisted the movement to open wide to women opportunities for higher education could be properly portrayed only by the pen of Swift. They are quite beyond Dooley's reach. One who is blessed with a sense of humor, even in modest proportions, is unable to treat those arguments seriously, particularly as the movement has gone along quite as if there were no rocks strewn in its path. The reason is simple enough. The solemn arguments were founded on assumptions which experience persisted in contradicting. Women would not be interested in the subjects which men care to study, and if they would, they could not master them: it is now conveniently forgotten that this argument was ever used; facts have demolished it utterly. Women would ruin their health if they spent years in study: the statistics prove that women students and women college graduates enjoy better health than their sisters. Women who had had a college education would become dissatisfied with the ordinary conditions of family life and would not marry: the statistics show, not only that the married college graduates are healthier than their married sisters, that there are fewer childless marriages among them and that they have a larger proportion of children, but that their children are healthier. There was left the retort that there is a distinctly feminine type of mind. This must be granted, especially as it is known to exist among men. It can, however, be educated.

The next entrenchment was the apparently frank and open-minded concession that women ought, of course, to have all possible educational opportunities, but apart from men. Here again experience is disappointing. Not only does coeducation exist in every part of the United States, but it exists by common consent and it works admirably. The separate colleges for women which thrive are to be found almost without exception in the narrow strip of states lying along the Atlantic seaboard—a locality which, as an

eminent and strenuous observer has remarked, is about as provincial as Honduras. The college professor who fears that his mind will be weakened and his vitality sapped through teaching women, takes rank with the advocates of the Baconian authorship of Shakespere's plays. A wise college president wrote a few years ago that "this inter-training and equal training takes the simper out of the young woman and the roughness out of the young man." He was right. The woman who grows up surrounded by women and taught only by women, and the man who grows up surrounded by men and taught only by men, are a long time in maturing. Both are abnormal. The family is the natural type, not the monastery or the nunnery.

The artificiality and the absurdity of the ordinary relations between men and women are chiefly due to social traditions which gave rise to the system of separate education. From the age of eight or ten both boys and girls are taught to look upon each other as something alien, to be shunned save amid conventional surroundings. Comradeship and friendship are eliminated and the only conceivable associations with the other sex are those of love and marriage. Anything else is bad form or distinctly suspicious. This seems to me utterly absurd, and that it is fraught with danger every one knows.

Does not woman require a different training from that provided for man? Whether Yankee or not, one must answer with the query, Which man? No two men require just the same training, much less all men. The same observation is true of women, they being human. It appears, then, that the system of education must be elastic enough to take care of infinitely varied individualities. We are just learning this and are acting accordingly. Women will be cared for in the new scheme as individuals and will not be lumped together as a sex. The "decorative art theory" of woman's education, by which it was to consist of a few accomplishments imperfectly mastered, has not

thriven well. It called for a *Puppenfee* education. Some women will fare best by combining their studies differently from most men. Modern education affords that opportunity. "Women themselves," as President Thomas, of Bryn Mawr, has pointed out, "must be permitted to be the judges of what kind of intellectual discipline they find most truly serviceable." They will not be likely to prefer a diluted program of studies.

But, really, these are all dead issues. The American people have settled the matter. The fifteen millions of children in the elementary schools are all (substantially) being coeducated. Of the public secondary schools, in 1897-8, 34 were for boys only, 29 for girls only and 5252 were coeducational. Of the private secondary schools, 1125 were coeducational, 327 were for boys only and 538 were for girls only. The latter figures mean that in the East and the South many of the well-to-do prefer separate education during the secondary school period, chiefly for social reasons. Of the colleges, in 1898, 70%—or, omitting the Roman Catholic institutions, 80%—were coeducational. From 1890-8 the number of men in coeducational colleges increased 70%, while in separate colleges for men the number increased only 34.7%.

Why discuss the matter farther? In the East there is a strong social prejudice in and about many of the cities in favor of the separate system of education. The reasons for it are easily to be understood and, in given conditions, have some weight. A college professor was once asked what possible objection he had to socialism. He answered that he had the same objection to socialism that he would have to walking down Fifth Avenue in a white duck suit, straw hat and red necktie. That was obviously conclusive. A prejudice well held to is worth two convictions.

Meanwhile, it is very proper to remark in conclusion that the Columbia plan of the separation of men and women during the undergraduate course, with equal opportunities for

them there and a common opportunity in graduate work, meets admirably our local and institutional needs and conditions.

NICHOLAS MURRAY BUTLER

SEVEN centuries have elapsed since the earliest of the European universities were well under way, and yet a discreet teacher may still diffidently refuse to attempt to state the specific purposes of a college course, to say nothing of estimating its actual results in practice. The elective system is, at bottom, a modest acknowledgment that mere *laissez-faire* is likely to produce happier results than the most cunningly devised scheme of the educational expert. If after centuries of experience we are uncertain as to the import of higher education for men, we may well hesitate even to guess what modifications of our present scheme of study will be necessary in order to meet the peculiar needs of the woman student, who has been in existence scarcely more than a quarter of a century.

The adjustment will come, I believe, not so much by taking thought, as through the subtle working of the present plan of permitting a student to choose his own studies. Our first and obvious duty is, therefore, so to broaden our program of study that it will embrace all those great fields of human interest of which the college can take cognizance. After we have done this, we may assume—provisionally, at least—that goose and gander should be served with the same sauce.

Hitherto, however, we have neglected and sometimes completely overlooked one of the most important of human preoccupations. In the clumsy traditional justifications of the college course—*e. g.*, intellectual and moral discipline and preparation for a successful career—no account is taken of one great and important result of a truly adequate education, namely, the successful pursuit in after life of the

highest and most enduring forms of pleasure. A scheme of study which does not afford an opportunity to develop and cultivate the beautiful in all its forms is obviously imperfect, whatever else it may offer.

Higher education has, however, been conspicuously wanting in just this requirement. During hundreds of years its essence was supposed to consist in the careful weighing of the apparently conflicting dicta of accepted authorities; for, as Abelard has it, this "stimulates in tender minds the greatest anxiety to come at the truth and is a practice which renders them more and more acute." This idea dominated education for centuries. But with the renewed appreciation of the Greek and Latin classics, not only did a new kind of wisdom come into esteem, but along with it an æsthetic element. *Sapientia* found a companion in *Eloquentia*. The recent development of the natural, social and historical sciences has undermined confidence in the adequacy and finality of the long-accepted theory of a liberal education, and has at the same time greatly broadened our scheme of study, but there has been an obvious and lamentable failure to secure a proportional increase of opportunities for the study of the beautiful in its various forms. *Eloquentia* still holds its own and receives due recognition in the study of modern literatures, as well as those of ancient times. With the exception, however, of the artistic in literature, the beautiful is pretty generally neglected, sometimes totally ignored in our college programs. At Harvard, it is true, the fine arts are dissociated from the technical preparation for architecture as a profession, and are presented to the college student at large by scholars as eminent as those who deal with literature, political economy, the classics or natural science. But this admirable sanction of the equipollence of the artistic is exceptional. Many of our smaller institutions boast a "Department of Fine Arts," but it rarely ranks with the older courses, and in some cases appears to be due to that

ill-considered anxiety for nominal universality which would include china-painting and the banjo among the subjects of instruction, rather than to an enlightened recognition of the true place of the artistic in education.

If we can inculcate, as we flatter ourselves that we can, a love of righteousness and truth, we may surely be justified in the hope of promoting, by appropriate instruction, an appreciation of the higher aspects of the beautiful. In a former number of the *QUARTERLY*, Professor Wheeler has pointed out the great advantages which Columbia enjoys in the magnificent Avery library, in the collections of the Metropolitan Museum and in a growing enthusiasm for the artistic which must be apparent to any observer of our great city. Unfortunately these advantages are not more conspicuous than is the absence of any instruction or encouragement in the use of them, apart from the study of architecture or archæology. Let us recollect that a college course is clearly an amenity, in the highest and best sense of the word, to an ever-increasing number of students, especially among women. We need not hesitate to prepare our students to exploit life's noblest pleasures. Recently a notable advance has been made in the establishment at our University of a department of music, under the guidance of America's most distinguished composer. May we not look forward to the speedy opening up of other fields of art to the students of both Columbia and Barnard? In no way can we work more certainly toward the discovery of the best course of study for young women, than by offering educational opportunities as nearly as may be conterminous with our normal life itself.

JAMES HARVEY ROBINSON

THE question whether women should receive a liberal education—which, being interpreted, signifies whether girls should go to college—is somewhat like the question

whether girls should ride bicycles. The answer is the same in both cases: namely, that some should, some should not. It may be incidentally noted that the same questions might be asked about boys and answered in the same way.

The most cogent objection, to the mind of the present writer, to sending girls to college was made to him some years ago by a young man who had but lately taken his degree at a well-known New England college. He said that he did not believe in the so-called higher education of women, because he did not believe in extending a bad system further. But, whatever ground there then was—or still is, it may be—for designating the system of college education in vogue in the case of boys and young men as a bad one, certain it is that the question of the advisability of extending it to girls and young women was then already—and is still more so now—of the sort known among publicists as academic. Already we had committed ourselves to the policy of expansion and had a more or less plain duty to perform in ruling our new territory along with our old—not, perhaps, in either case, as we would, but rather as we best could.

It might be, and doubtless has been, suggested that women are not so original in mind as men and that they have given proof of that fact in borrowing from men their system of higher education. It is even conceivable that such objections may have been made by men who evince their own originality by furnishing their minds with ideas on which the label "made in Germany" is not yet wholly effaced. It might, on the other hand, be said that certain common elements of culture which are, or should be, the heritage of educated humanity—or, at least, occidental humanity—without regard to sex, may well be transplanted a short way and propagated in a new soil, even if some of the old soil cling to their roots here and there. Such elements of culture may well adapt themselves to their new environment and somewhat change their shape and form, perhaps not always for the worse.

To come to more practical matters,—and here we touch on some of the evils incidental to the traditional system of college education for men,—we should be sorry to see young women emulating young men in some of the methods only too commonly employed in passing examinations in required subjects. Has the elective system eliminated these evils under its benign sway? and, if so, why should examinations in elective subjects be proctored? One would also be sorry to see young women emulating young men in the pursuits of marks, as though these bore any precise relation to real acquisition of a subject. It has been suggested in other quarters that one advantage of colonies is the purifying of home politics. It is to be hoped that the advantage exists outside of Utopia. It is also to be hoped that, following the analogy hinted at, the liberal education of young women may react favorably on the liberal education of young men. One who has seen, as one of their number, a large part of a class of young men grow pettier and pettier in their views of college-study under the influence of a painfully exact marking-system that rated the results of four years of college work in five places of Arabic numerals might well be sorry to see young women suffering under the same or a similar blight. A real danger may well lie in making the estimates of study on the part of students numerically—or even alphabetically—exact, while the work itself is not equally so.

If the college education of women is to be what it should be, it must be broad without shallowness, minute without pettiness; it must be so conducted that the whole structure may be constantly regarded as well as the parts; it must be fitly framed together—vertebrate, not invertebrate. We must have the star, as well as the wagon. Is not the same true of the college education of young men?

In a word, we have not merely an intellectual problem before us, but a moral problem in the truest sense. Character must be built up in college. Honest study, honest

thinking, a regard for real intellectual growth and acquisition must be stimulated. Students must be led to regard what they get into their heads and hearts, rather than how high they are rated on examination reports. They must regard the weightier matters of the law, tithe the mint and cummin as they will. They must be put on their honor in the examination-room, as well as elsewhere. Manhood and womanhood should be allowed to develop.

The "ethics of the surface," as a recent writer has termed them, play their part too. Conduct counts for something. The *mores* of the old proverb may mean manners as well as morals. There are the ethics of the class room and the ethics of the basket-ball field; and there are their interactions. The terms lady and scholar should be as naturally wedded in the new time as gentleman and scholar were in the old.

The element of sex can perhaps be as easily eliminated from education as from other departments of human activity. We all know how easy that is. It is, after all, to the common ground of intellectual life that we have principally to address ourselves in liberal education rather than to the ill-defined border land of differences based on sex. It may fairly be asked whether we have as yet defined that border land well enough even to keep surely outside it, if we so desire.

MORTIMER LAMSON EARLE

THE COLLEGE AND THE UNIVERSITY

EXTRACTS FROM AN ADDRESS DELIVERED BY
PRESIDENT LOW AT COLGATE UNIVERSITY,
APRIL 20, 1900

The American college, in its beginnings, was simply an English college transplanted to American soil. Like everything English so transplanted, it has been modified in its development and has taken on characteristics peculiar to itself. For the purposes of this discussion, it is enough to say that the American college, during all its history, has trained a great many forceful and effective men. It has not, however, made many scholars. It has, indeed, awakened in many men a desire for scholarship; but this desire they have had to satisfy elsewhere, not because the American college has not satisfied it to the extent of its ability, but because the American college, as such, did not possess the facilities for training scholars in the technical sense of that word. In the two decades from 1850 to 1870 the college-bred men of America who desired to become scholars began to go abroad for study in considerable numbers, and especially to the German universities. These men found in Germany a system capable of making scholars, and offering facilities for scholarship of which they had never dreamed. Returning to this country in larger and larger numbers, with this knowledge and with this inspiration, such men became centers of agitation here for the development in this country of facilities for educating scholars that should be comparable with those to be found in Germany. The German system was taken as the type by these men, partly because German hospitality to them as foreigners had given to them these great privileges, but principally because neither the English university nor the French university by any modification could be adapted to American needs. . . .

This discussion will have prepared you for the definition which I am now ready to give of an American university, as distinguished from an American college. I think you will perceive that it is a definition entirely independent of all questions of organization. The aim of the American college, as I conceive of it, is to give a liberal education or, if you please, to develop the man. The aim of the American university, on the other hand, is to make a specialist—it may be in one of the professions, or as a historian, an author or a man of science. Theoretically and ideally, the university ought to be founded on the college, because a man ought to be broadened before he begins to specialize; but practically this is not a necessity of the situation, however desirable it may be. On the other hand, it must be said that, wherever the aim of training specialists is distinctly recognized, an institution that unites with this aim the conduct of a college is still properly called a university; for the name university is evidently a name of wide comprehensiveness.

From this point of view, Colgate University, for example, is properly called a university, not because it consists of an academy, a college and a theological seminary, but because, through its theological school, it comprehends distinctly the aim of fitting men for the ministry. That is to say, so far as the ministry is concerned, it aims to train specialists, as distinguished from the liberal training which it aims to give in its college department. But Colgate University has this aim of making specialists in only one direction. In the complete university, that aim may be pursued in every direction. Colgate, being a denominational institution, finds it easy to pursue this aim along the line of theology. In the larger American universities, that is the one direction in which, by reason of American conditions, it is not easy for the university to develop. This is why it is so much more common in the United States to see important theological seminaries than impor-

tant schools of medicine or law being carried on apart from universities. Even at Harvard and at Yale, where the divinity schools are historically integral parts of the university, they have not developed as have other divinity schools, for the reason that the large university no longer furnishes the denominational atmosphere which will support a strong denominational divinity school. . . .

From the Columbia point of view, an American university is an institution whose aim it is, in as many directions as possible, to make scholars and specialists, including in the latter term men of all the professions. The acceptance of this theory at Columbia accounts for one important difference in our organization from that which is usual. At Harvard, for example, the Lawrence Scientific School is under the same faculty as Harvard College, known as the Faculty of Arts and Sciences; and at Princeton, a single faculty controls the academic department, the John C. Green Scientific School and the graduate work. At Columbia, on the other hand, the Schools of Applied Science are not looked upon as in any way related to the College. They are considered to be professional schools of the university, their object being distinctly to make specialists in mining and metallurgy, in chemistry, in engineering and in architecture. The comparison, from this point of view, of the Columbia organization with that of Harvard, will be illuminating, because between these two the contrast is most marked. It will be understood, I am sure, that in bringing out the points of difference in the organization of the two universities I am not indulging in criticism of Harvard. I am only trying to make clear the differences in the development of the two institutions; and, in accounting for these differences, to explain them.

Starting from the definition of the college and the university which I have given, that the aim of the college is to give a liberal education and the aim of the university to train specialists, Columbia, like Harvard, gives in its col-

lege only the A.B. degree. The college has no parallel courses leading to different degrees, and it still demands a considerable fraction of required work; although its optional privileges, beginning in the freshman year, gradually enlarge until, in the senior year, they include the privilege of studying under any faculty in the University. The College, however, at Columbia, is looked upon as an entity by itself and has its own faculty; which, as a faculty, has no other concern except to make the College as good as possible and to enable it to realize its aim of giving a liberal training in the fullest measure. All of the specializing work of Columbia, whether professional or non-professional, is under the charge of separate faculties, whose only business it is to fulfill the duties of making scholars and specialists in their own lines as well as possible. The recognized difference in aim between the College and the University seems to us to apply as clearly to the non-professional as to the professional work, and leads inevitably to a difference of attitude towards the student in the College and in the various University schools. In some of the University schools the entire course is required; in others it is wholly elective; and in yet others required and elective work may be taken in different proportions. In other words, the aim in each school being distinctly recognized, whatever curriculum appears best suited to the accomplishment of that aim is adopted without regard to any other consideration.

At Harvard, on the other hand, the Faculty of Arts and Sciences not only has charge of the College and the Lawrence Scientific School, but also of all the work in the subjects comprehended in both of these schools that may be taken by graduate students for the degree of Master of Arts and Doctor of Philosophy. All of this work is so placed under the charge of one faculty, as I suppose, because it is looked upon as being essentially one thing. The freshman beginning his college course is thought to have begun, as a freshman, not only the work that leads

to his A.B. degree, but also the work that finds its culmination in the degree of Doctor of Philosophy, obtained in any subject you please. If this be not so, it is hard to understand why the same faculty should have charge of both the graduate and the undergraduate work. These, then, appear to be the two conceptions that underlie the differences in organization at Harvard and Columbia. At one university the idea apparently prevails that the aim of the higher education, so far as it is non-professional, is the same through the whole undergraduate and graduate work; and at the other the idea prevails that the same difference of aim which is recognized and acted upon as regards the college and the professional schools of the university, exists and should be acted upon as regards the college and the non-professional schools of the university. The second idea has at least this to say for itself, that it preserves well the individuality and integrity of the American college.

It cannot be denied, however, that the small American college (by which I mean a college unconnected with a large university) is obliged to find a place for itself to-day under conditions widely different from those which have existed heretofore. The high schools have been carried up in their work and the universities have been carried down, so that the colleges no longer have a well-defined and unchallenged field which is theirs alone. The great majority of students leave school at the end of the grammar grades; another large number at the end of the high school; still another large number cease their studies at the end of the college; and it is, after all, only a few out of the great number of those who go to school who are privileged to continue their studies until they have taken an acknowledged position as both broadly trained men and recognized specialists. It is inevitable, therefore, and not undesirable, that the high schools should carry some students beyond the point where they formerly went to college; and it is also natural, and not undesirable, that colleges should,

where they can, carry students beyond the point where they may fairly be considered to be liberally educated men, and therefore ready to specialize to the best advantage. For both the high school and the college, by so doing, will give to many men, who cannot go further in their studies, a better education than they otherwise would get.

On the other hand, it is of the utmost importance that the students who are to go forward through college and the university should not waste their time in detours that take them aside from the mark. Such students as these should be permitted to go from the high school to the college when they are ready, and also from the college to the university at the proper time. I believe that the small college, using the term again in the same sense as before, can profitably duplicate a part of the work done in the high school. I think that at this point in the student's education a college will cover more ground in the same time than the high school can cover, because the traditions and the atmosphere of the college are more favorable for that sort of work; and it may also carry, if it pleases, students who are not going to the university somewhat beyond the old college limit. If I had the destiny of a small college in my keeping, however, I should lower the entrance requirements to what they used to be a generation ago, and I should be satisfied to do now the work that was so well done then. By pursuing this policy, the students who are proposing to specialize could be transferred to the university at an earlier age than now, just as well equipped as they are to-day for the work that they are expected to do in the university. That is the significance, it seems to me, of Harvard's policy of permitting students to take their A.B. degree in three years; of Columbia's policy of permitting seniors to study under any faculty of the University; and of Chicago's policy of giving a diploma of Associate in Arts at the end of the sophomore year. In a country like ours, it is altogether unreasonable that students

should be as old as they now often are when they receive the degree of Bachelor of Arts, or at least when they begin to specialize. The policies just alluded to show the restiveness of the large universities under this constantly increasing age limit.

America needs broadly trained men as much as it ever needed them; and the age in which that liberal training ought to be obtained is from sixteen to twenty, or from seventeen to twenty-one, just as it used to be. I think that small colleges which would be content to make the old college tender, enriched as much as it can be according to their ability, and would make it available at the former college age, would find a demand which would be persistent and growing for just this education. Such colleges cannot hope to compete with the universities in the matter of training specialists, and they will do injustice to their own students who propose to specialize if they try to. If each college will formulate for itself, with definiteness, its proper aim, the means for carrying out that aim will be clear enough. In point of view of breadth of opportunity, a small college can never compete with a college which is part of a university; but, in point of view of quality of work within its own range, the small college can challenge the competition of the large ones and of colleges connected with universities without fear. A denominational university is a contradiction in terms; unless, as here at Colgate, the only direction in which it aims to specialize is in preparation for the ministry. But, for the training of men and for the development of character, the American people must change importantly before the denominational college will have lost its place. Such a college will be valuable, perhaps one should say, not so much because of the merits of the denomination that controls it as because the loftiness of ideal, the earnestness of purpose and the qualities of character that spring from the religious impulse are factors in the education of men which are in no danger of losing their power.

THE SCHOOL OF ARCHITECTURE: ITS
RESOURCES AND METHODS

WHILE in England and in France the schools of architecture are generally attached to schools of painting and sculpture, those in this country have generally been grafted upon schools of science. The necessary instruction in physics and chemistry, mathematics, mechanics and engineering being already provided, all that seemed necessary to equip a school of architecture was instruction in drawing and design. These branches were, in the oldest of our schools, that established at Cornell University in 1863 and that of the University of Illinois, for many years under the sway of English traditions. But the little class which Mr. Richard Hunt started in the Studio Building in Tenth Street, when he returned from Paris in 1857, eager to hand on to others the lamps he had there lighted, he of course conducted after the manner of a Paris *atelier*. This class was the immediate parent of the school at the Institute of Technology, founded in 1865, and hence of our own, which dates from 1881. Both there and here, and wherever else schools of architecture have since arisen, the methods of the Paris school have been more or less precisely followed, and the actual instruction has been chiefly in the hands of its pupils or its pupils' pupils. To this instruction in science and in art the different schools have added the teaching of history, the modern languages, æsthetics, the auxiliary arts and the writing of English, in various proportions, with more or less of practical construction and office work, in anticipation of experience in actual affairs.*

* Papers relating to this School have been printed from time to time as follows:

In the *School of Mines Quarterly*:—"The Instruction in Architecture in the School of Mines," Nov., 1888; "The Study of Architectural History," Nov., 1895; "The Study of Architectural Drawing," April and

But, though the American schools of architecture are so far all very much alike, they differ considerably in the degree of importance they assign to these different subjects, in their methods of instruction, and perhaps still more in their equipment and in the more or less favorable circumstances of their environment.

The surroundings of our own school are obviously most fortunate. The most conspicuous feature among them is the city itself—a great museum of architecture, with full-sized models of almost every species of building, many of them of great excellence, and a very large number of them carefully based upon the best examples, in their details if not in their entirety. Those which are still in process of construction offer unprecedented opportunities for the study of the best modern practice. The Metropolitan Museum, just across the park, offers, besides its collections of painting and sculpture, innumerable examples of the applied and decorative arts auxiliary to architecture, while the Willard collection of architectural casts and models is, if not the largest, probably the best selected and the best arranged series in the world. The shops are full of the best modern paintings and of every species of artistic manufacture, displayed in their windows so that he who walks by may study them, and the annual exhibitions of the Architectural League illustrate the present condition of architectural design and the best practice in architectural drawing. Even within our own doors we have an invaluable equipment of drawings, photographs, books and

July, 1896; "Professional Draughtsmen as Special Students," July, 1897; "The School of Architecture in its New Quarters," April, 1898.

In *Architecture and Building*, "The New Course in Architectural Engineering," August, 1897; and in the *American Architect*, "Perspective and Descriptive Geometry," April, 1898, and "An Address before the Architectural League," August, 1898.

Most of these papers have been printed for distribution and may be obtained at the School. A further paper on "The Study of Practical Construction" will appear in the next number of the *School of Mines Quarterly*.

prints that count by thousands, lantern-slides by the hundred, plaster-casts that cannot be duplicated, and a growing collection of building materials and appliances. Indeed, the buildings of the University themselves are not without their lessons.

It is something, too, to spend four years in a town where so many good architects are doing so much good work. Personally, they are hardly in evidence. But their near presence is not forgotten, and it gives dignity and importance to our undertakings. It is seen to be no light matter to be in training for such a career as theirs. Moreover, they are always glad to have our graduates in their service, and not only is this of ultimate advantage to our men, but the expectation of it is, meanwhile, a powerful incentive to self-improvement.

It is true that at present we are able but scantily to profit by this wealth of material lying just at our doors. Our time and our students' time is mainly taken up with the A B C of the art. We seldom, in point of fact, have to do with anything outside of our own walls. Given a few thousand dollars' worth of books, drawings and photographs, and what we do we could do just about as well any where else as at 116th Street. But the possibilities are boundless; and when the schools in less favored localities have succeeded in doing what we are now doing, we may hope to leave this work to them and advance to the enjoyment of our priceless inheritance. What we are now doing is no measure of what we are ready to undertake.

But already we are in the full fruition of one of our most valuable possessions. The Architectural Library, established by the munificence of Mr. and Mrs. S. P. Avery, in memory of their son, a young architect of most excellent promise, is one of the largest and best collections of such books anywhere to be found. Moreover, it is administered with a liberality and a consideration for the needs of students which more than double its value. In

one respect it is believed to be unique among public libraries, in that it has attached to it a well equipped draughting room, where students and visitors can work under conditions unprecedentedly favorable. Of this we and our students already make the utmost use, and find it of the greatest service.

What brings our men so much to the Avery Library is the unusual prominence we give to historical studies, and one reason why we give to these studies more time and attention than they receive in some other schools of architecture is that our men may make the acquaintance of books and acquire the habit of using them. But the chief reason is that it enables our students to enlarge their professional resources, as if by travel, and thus to escape the limitation of thought which so often shows itself in schools by an academic monotony and in the practice of the profession by poverty of ideas and a premature exhaustion of the imagination. To this end we not only give from three to five hours a week each year to stated lectures upon architectural history and ornament, taking up ancient history in the first year and mediæval and modern in the second and third, but we go so far as to interrupt the studies in design, which are our main concern, and for six or eight weeks in the spring substitute for them exercises in historical research, ransacking the library and the collections of prints and photographs, and making sketches and tracings, on a carefully prepared system, of plans, sections, elevations and details. By thus turning to the works of the masters, we hope to avoid the growth of a school style and that habit of copying one's own work which is a vice natural to schools of art. Wholesome traditions we hope to establish; but the process of breeding in and in, so to speak, by which each generation of students imitates the successes of its immediate predecessors, is a sure road to barrenness of invention and to the caprice and eccentricity which come in as the inevitable consequence of it. We

find that the time thus taken from the practice of design is twice blessed. The work in design is itself promoted by the interruption.

A feature which distinguishes our methods from those of most institutions of learning, and is perhaps not elsewhere to be found, still further brings the Avery Library into the field of our activities. We have managed to concentrate almost all our stated instruction into the first three years of the course, leaving the fourth year almost entirely free from recitations and lectures. As there are, accordingly, few lessons to study or notes to write up, the evenings of the whole fourth year are left free for reading and writing, and the Avery Library is largely put in requisition for this work. Every student in the summer preceding his fourth year prepares a paper of five or six thousand words, by way of practice for what is to be a chief occupation of the winter. Then the eight months of winter evenings that follow are devoted to what we call our advanced architectural history, similar papers, longer or shorter, being prepared every month or six weeks until spring. These papers, beginning with the summer essays, are read before the class on Friday mornings throughout the year. They have proved to be, in general, entertaining and instructive; they open up fields for investigation that the stated courses of study necessarily leave on one side; and they afford excellent practice in collecting and arranging material and in putting the results into shape. For this literary work the weekly essays written during the two previous years, including those which accompany the work of historical research and the more elementary themes written during the first year, afford some preparation.

The whole of the daytime in the fourth year is thus set free for the practice of drawing and design, exercises which are so much interrupted in the previous years by other studies that hardly more than the bare elements can be mastered. But in the fourth year the whole day is

given to work in the draughting-room, time which is of the greater value for being consecutive and free from interruption. Large and small problems alternate through the year; and at the end, in April and May, works of considerable pretension are undertaken under the name of graduating theses. These are hung around the walls of the draughting-room through the following year, to be replaced in turn by the work of their successors. The variety of character exhibited in these drawings, the ultimate fruit of our endeavors, and the marked individuality of treatment which they not infrequently present, testify to the value of the historical studies upon which they are based. They often seem more like work from so many different offices than like the work of a single school, controlled and directed by the same personal influences.

Another feature which distinguishes our work from that of some of our neighbors is the special advantages that we offer to professional draughtsmen. But these have already been sufficiently set forth in another place.

In respect to the methods by which these ends are reached, we find ourselves, as we learn the lessons of our own experience, departing more and more in matters of detail from Paris traditions. This is what was to be expected—and, indeed, hoped for. The *École des Beaux-Arts* is indeed, our *fons et origo*, but the conditions are too different, there and here, for close imitation to be safe. In Paris the *nouveau* is thrown into the deep waters of the *atelier* to flounder as he may, with a dozen *anciens*, of greater or less degree of maturity, to teach him his strokes and to see that he does not hopelessly go under. By hook or by crook, he picks up a knowledge of what he needs to know, finding always somebody at hand who, in requital for such services as he can render, will answer all his questions as they arise. It is an admirable system, prompt and efficient, but it requires *anciens* to work it; and *anciens*—that is to say, skillful and experienced men—would not stay

in school after they had become experienced, if they had not the *Grand Prix de Rome* to look forward to. But they would not even go to Rome, and there spend three or four of the best years of their lives in further academic study, if they had not the promise of government patronage to look forward to on their return home. It is upon this government patronage that the whole Paris system rests. The *camaraderie* and mutual help that make the system of *atelier* instruction so delightfully efficient would be of little value without it, for the *anciens* would not stay long enough to get really old.

The Paris schools possess the further advantage that the best architects in France find leisure to take an active part in them, supplementing and completing the work of the *anciens*. This advantage cannot be had in this country. In a school like our own, all the instruction has to be given by two or three men—two or three teachers to eighty or a hundred students. The work must needs be done in classes, not man by man, and we must make up for this disadvantage by improving and perfecting our methods. For the purposes of class instruction the work has to be analyzed and systematized into a series of carefully graded exercises. In this we have made good progress and have already achieved excellent results. The more elementary work is done quite as well as it is done in Paris, and more promptly and surely. Even the more advanced work seems to be quite up to the Paris standard for work of the same grade, and considerably more uniform in excellence, as would naturally happen from the greater uniformity of the teaching. All this leads us to hope that, if the time ever comes when we can keep our men as long as the *ateliers* keep theirs,—or, which comes to the same thing, can begin our work with students already advanced,—it may equal also the more advanced work of the *École*. Meanwhile, the best thing our men can do, if they want to carry their schooling further, is to go to Paris; and that

they do in large numbers, making for themselves there an excellent name.

But it is in the internal administration of the school that there is the greatest departure from the Paris traditions. For the last hundred years, at least,—that is to say, ever since Napoleon proclaimed the *carrière ouverte aux talents*,—the system of competition for place has pervaded French institutions. The *École des Beaux-Arts* is an admirable and efficient organism of tests and examinations, mentions, medals and all sorts of honors, calculated to stimulate its students to their utmost endeavor and to add the spur of emulation and personal distinction. For all this machinery the promise of government support to the man who wins in the race furnishes the motive power. The whole is so complete in every part, so smooth and effective in its workings, and the result so sure, that one is disposed to think that like effects can be produced only by like causes, and that the best anyone could do would be to profit by so brilliant an example and follow it point by point. But in this country such a course is impossible. The mainspring of government patronage is wanting; and, though one might fancy that, even so, the forces of rivalry and personal ambition would suffice to accomplish the same ends, it is doubtful whether even in Paris, where all the habits and traditions of society are in harmony with the system, the medals and mentions, even the *Prix de Rome* itself, would prove to have any lasting validity without it. It is not the piston or the driving-wheel that moves the train, not even the boiler behind them, but the coal hidden under the boiler. In this country, where the whole system of examinations and competitions and prizes is unfamiliar, uncongenial to our habits and in general distasteful, there would seem to be little chance of making it effectual, even if what experience of it we have had did not discourage the expectation. And, in fact, the present tendency seems to be the other way. The prizes for

scholarship established by a previous generation have not worked as was expected; and the establishment of new prizes for school work is, in this locality at least, officially discouraged. Even in architecture the travelling scholarships have in some cases failed to arouse interest, and the proposal for a sort of American *Prix de Rome* has met with but a feeble response. The traditions and habits, as well as the underlying forces, that render this system so successful abroad seem to be lacking here. In this country the ultimate energies that make the world go round reside not in the government but in private persons, and we rely upon personal interests to carry to an end what personal initiative has begun.

Moreover, the conditions which in Paris reduce to a minimum the disadvantages of the system are also lacking in this country and are not likely to be supplied. Gossip and scandal, charges of partisanship and undue influence among the judges, and of intrigue and bad faith among the competitors are, indeed, not unknown even in Paris. But these things need not be taken too seriously, for they are inseparable from the system. But the more offensive and obnoxious elements of personal jealousy and hostility are there largely eliminated by the fact that the rivalry and emulation in the School of Fine Arts is not between persons, so much as between different *ateliers*. This raises the whole tone. For private quarrel is substituted, as it were, a state of public war, with the dignity and responsibility and the freedom from personal feeling that common sacrifices in a common cause naturally involve. Between members of the same class in the same school there is no such protection from the baser passions.

Besides, after all, we must believe that even in France—in France, indeed, more than anywhere—the real motive power in all their splendid achievements is to be found, not in any external conditions or inducements whatever, neither in the hope of government employment nor in

academic honors. The somewhat second-rate men who throng the government schools, in the hope of escaping military service, may very likely need these pricks and goads to keep them up to their work. But with the best of the Frenchmen, as with the large and brilliant company of American students who join their ranks, the motive forces, as we must believe, are to be found within. It is the importance and interest of the subject and their own enthusiasm for it that animate the men at the top of the school and crown its work. So in England. The English may be a nation of shop-keepers, as Sam Adams called them, and the extraordinary prevalence of money prizes for every species of scholastic endeavor may seem to give evidence of a most mercenary spirit. But this is a mere national habit, a curious tradition; and one must believe that English culture and scholarship would be the same, if all the exhibitions and foundations were abolished, the English people being what they are. It is not these that achieve the result, but intellectual character and elevation of spirit.

For our own part, at any rate, these are the lofty foundations on which we prefer to build; and so far we have found little occasion for serious misgivings and little inducement to change our policy. So long as the standard of performance seems to be steadily advancing, as it does year by year, we feel that there is no telling what degree of excellence may not be attained under these wholesome and elevating conditions in a stimulating and generous atmosphere. These are the influences that an architect must rely upon to carry him happily through the vexations and labors of a most exacting profession. These must be his permanent motives of conduct; and the sooner he is habituated to them the better. If his love and devotion are not of this fine quality, he had better do something else. If they are sufficient for these encounters, they will certainly suffice for the work of a school. Indeed, as William Morris has

said, "The true incentive to useful and happy labor is and must be pleasure in the work itself;" and, whatever may be said against architecture as a practical calling and mode of earning one's living, as a study it is, for those qualified to pursue it at all, the most delightful in the world.

It is true that we thus lose the excitements and the picturesqueness of the arena, that the spectacle is less entertaining to lookers-on, that life is somewhat less amusing to ourselves, and that sometimes we have men—occasionally we have a whole class—who lapse into sloth and seem to need some artificial stimulant. But in many cases they presently recover their tone, and then we are rewarded for our faith in the *vis medicatrix naturæ*. Even where this fails—and we have to admit that our system is not without its victims—we are comforted by two considerations. The first is, that prizes and personal distinctions benefit at best only the men at the head of the class, and are likely to discourage those who from lack of early training, from immaturity or from some peculiarity of temper are beyond their reach. In any body of young men between the ages of eighteen and twenty-two there are many such; and hardly a year passes in which the slow development and final success of an unpromising student do not show us what harm may be done by rating men, prematurely, according to their actual achievements. It is not the physical advantages of a steady hand, or even of a quick eye, that tell in the long run, but the mental qualities of good sense and good taste and a creative imagination. These are qualities that may presently develop themselves in a man whose fingers are in the beginning all thumbs. It does not do to discourage such men at the start, by gazettement at the foot of the list.

All this does not mean, however, that the difference between good and bad work is not recognized, or that the achievements of the dull or lazy are confounded with those of the more capable or more diligent. If the men

are not weighed, their work is. The designs are not, indeed, marked as first or second in total merit; but they are analyzed and criticised before the class, so as to expose their strong points and their weak points, in planning, composition, detail and rendering. This seems more intelligent, as well as more just, than to say that one scheme is on the whole the best, in spite of its faults, and another unworthy of mention, in spite of the skill and pains bestowed upon it. It is certainly more discriminating, more consonant with the purposes of a school and more helpful to the scholars. In these judgments we often avail ourselves of the friendly services which the architects in the town are always ready to offer.

Nor does it mean that our men are without the spur of personal ambition and of the emulation which is kindled by admiration of their betters. But an eager desire to do as well as the best is one thing; wanting to win a momentary fame by beating them on the mark-list is quite another. Nor are they without the stimulus and encouragement that come from the hearty recognition and appreciation of success. But they escape the depressing influence of formal comparisons and official depreciation. As one of them was heard to say to a visitor, some years ago, "The best thing about this school is that one man is as good as another." Moreover, they escape also the duplicity of purpose which tends so greatly to impair the sincerity of work done with two ends in view. As another of our men, and one of the best of them, once said, in speaking of the graduating theses, "The most satisfactory thing about them was that we knew they weren't going to be judged. We felt perfectly free to do what we really thought was best, without having to consider what the jury would probably think."

The other reason for keeping on as long as we can in our present way is that we are thus exempted from the personal jealousies and antagonisms which, as may be seen even in the army and navy, a system of rank and promotion can

hardly escape. As it is, our society seems eminently free from these disturbing influences, and we are naturally slow to accept a policy that might bring a cloud or storm into the serenity of our skies.

In all this we are glad to feel that we have the loyal and cordial support of our own graduates, and that those among them who are most earnest in urging us to keep to our own ways, and not to budge, are those who have had most experience of the *École des Beaux-Arts* and are most grateful for the service it has done them.

But these considerations apply only while the men are in school. When once they are out and on their own feet, it is a wholesome exercise, during the next six or eight years, for them to test their strength and prowess against each other. For this the travelling fellowships, endowed by Mr. KcKim and by Mr. Perkins, and established by the Trustees themselves in recognition of Mr. Schermerhorn's liberality, afford an excellent field. We refused these endowments for the men still under pupilage, saying that we did not believe in prizes for school work and that our men had no time while in school to spend upon prize work. But for our graduates they are an unmixed good. The men who win obtain a great benefit, and the men who lose have an opportunity for graduate study, on the lines of their school work, which they highly prize.

This result of these endowments is perhaps quite as beneficial as the other. They are open to all graduates of the school under thirty years of age; and every year ten or fifteen men, sometimes more, occupy the leisure of two or three months in the study and execution of the required drawings. Among them are always some who are pursuing their studies in the *École des Beaux-Arts*; and it is gratifying to find that neither in the arrangement of the plans, in the composition of the elevations, nor in the execution of the drawings, do these designs show any obvious superiority over those made in this country. This

encourages us to believe that, if we were able to maintain a graduate course or—which comes to the same thing, as has been said—to advance by a year or two our requirements for admission, so as to make the most of our environment, we should be able to do work of a more advanced character as efficiently as we now do what we now undertake.

The work done by the holders of these travelling fellowships while abroad is adjusted rather to further each man's personal needs than to achieve notable results. When it comes home, it exhibits every variety of performance, from notes and sketches of travel to measured drawings, or *projets* made in the *École des Beaux-Arts* or some of its preparatory schools. This freedom is characteristic of our policy, even within the lines of our school work. While the tasks we prescribe, whether in drawing or in design, in historical research or in the writing of essays, are defined by strict limitations, within that range we encourage the greatest possible variety. In this way we not only foster independence and individuality, but manage to keep men of very different calibre at work in the same field, without over-taxing the weak or holding back the swift-footed.

The year always ends with the exhibition of the total work of the school, and the work done abroad by the holders of the fellowships serves as a most attractive side-show. We put up all the work, that of the worst performers as well as that of the best. This we do, not only because it is quite in harmony with our general policy of avoiding personal distinctions, but because we are really quite as proud of the poor work as of the good. Any class may be trusted to have a few exceptionally bright men who will do us and themselves great credit. But this credit belongs mainly to them. The most that we can pretend is that the honors are even. The successes achieved at the other end of the class, however, we feel to be mainly our own; and when it happens, as it sometimes does, that it is not easy at first glance to tell the good work from the

poor—when visitors ask us, as they sometimes do, what sort of work the incapables do, and we tell them that it is before them, then we feel very much gratified. It bears testimony to the efficiency of our discipline. But this happens only in the earlier years, the years of training. Before these are through with, the best men are well ahead.

These are the favorable conditions under which our work is done, and these are the ideas and ideals by which it is inspired. We are enrolled among the Schools of Applied Science; but this is rather a tradition from an earlier age than a just expression of present conditions; for, though we avail ourselves of their neighborly offices to gain for our students in architectural engineering advantages not elsewhere to be had we are almost as independent of them as is the College. We are, indeed, in spirit really more akin to the College than to them, in spite of our claim to be a professional school and not an undergraduate school, and of our refusal to look upon our students in the light of sophomores and freshmen. Architecture is, in its many-sidedness and in the generosity of its aims, much of the nature of a liberal study, and we are disposed, so far as may be, to have it altogether such. It is this attitude and temper on our part which most makes our men value the time they spend with us, and it is this, perhaps, which most differentiates this school from those in which, as in the *École des Beaux-Arts*, men are regarded chiefly as designers, and makes it resemble those which regard their students as, first of all, men.

The annual exhibition opens with an annual banquet, a modest repast to which the graduates of the School flock in large numbers, and at which the graduating class are always present as guests, so that they may take their place in the company of their predecessors. These gatherings notably accentuate the personal and friendly relations, the establishment and furtherance of which is one of the best results that such schools can attain.

WILLIAM R. WARE

CHARLES H. WHARTON, S.T.D.

SECOND PRESIDENT OF COLUMBIA COLLEGE

THE presidency of the Rev. Dr. Wharton was scarcely more than nominal; for he was elected on May 21, 1801, and resigned on December 11 of the same year. There is no record of his having performed any official service, except presiding at the Commencement of 1801. The diplomas issued in that year, however, bear his signature.

At the time of his election Dr. Wharton was the rector of St. Mary's Church, Burlington, New Jersey, to which he had been called in 1796. He was born in St. Mary's County, Maryland, on the paternal estate known as "Notley Hall," which had been presented to his grandfather by Lord Baltimore. His ancestors were Roman Catholics, and when twelve years of age he was sent to the English Jesuits' College at St. Omer's in France. He was prominent among his associates for his studious habits, and conversed in Latin almost as familiarly as in English. In 1772 he was ordained a priest of the Roman Catholic Church; and during the Revolution he officiated as chaplain in Worcester, England. He was, however, deeply interested on the side of his country and an ardent admirer of George Washington, to whom he addressed a poetical epistle. Dr. Wharton returned to America in 1784; and shortly afterwards, embracing the teachings of the Protestant Episcopal Church, he was ordained to the ministry. He became rector of Immanuel Church, Newcastle, Delaware; and removed from there to Burlington, where he remained until his death in 1833, in the 36th year of his rectorship.

Sprague's *Annals of the Clergy*, says of him:

The deserved reputation which Dr. Wharton's scholarship had procured him rendered him an object of great desire with several of our literary institutions. As early as 1785 he was sought for as the principal of the

Protestant Episcopal Academy of Philadelphia. In 1801 he was unanimously elected to the presidency of Columbia College. This office he accepted and he presided at the Commencement, but in the course of the year, to the great disappointment of the friends of the College, tendered his resignation. In 1803 he was powerfully urged to become principal of the college at Beaufort, South Carolina, and the rector of the parish there, but declined the appointment. The emoluments of office in both these latter cases would greatly have exceeded the value of his parochial living ; but he loved retirement, and was unwilling to undertake duties which his health might not enable him to discharge.

Bishop Doane, in the *Annals of the American Episcopal Pulpit*, pays the highest tribute to Dr. Wharton's character, both as a man and as a scholar : " With the best education that Europe could afford ; as a divine, second perhaps to none in America ; as a controversialist, unanswered and unanswerable ; he was not only unconscious of his distinction, but he would not be made conscious of it."

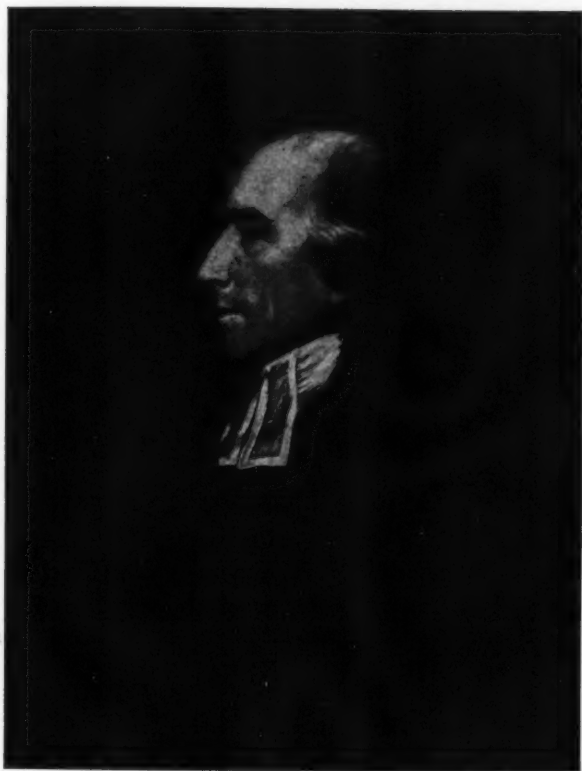
JOHN B. PINE

BENJAMIN MOORE, S.T.D.

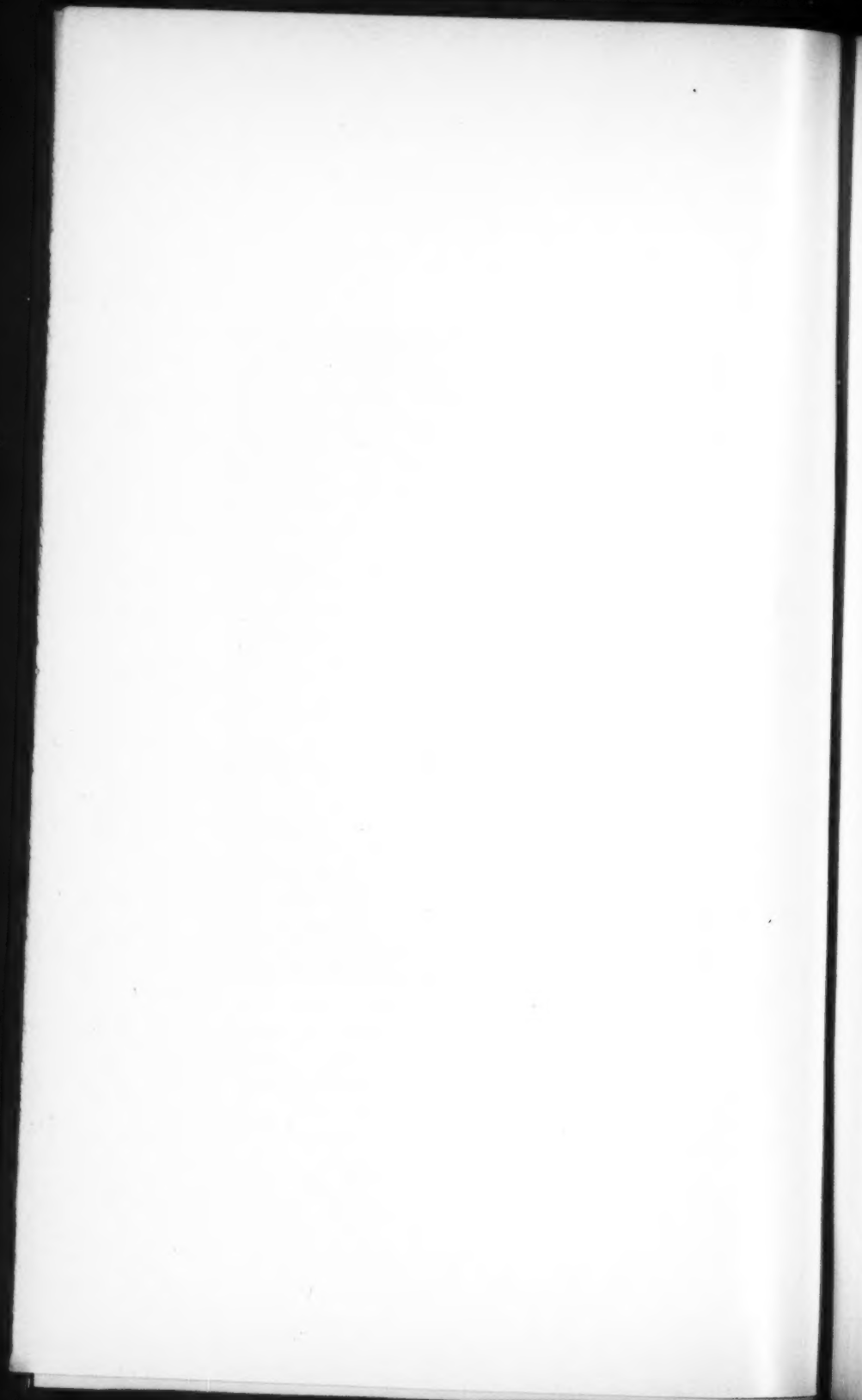
THIRD PRESIDENT OF COLUMBIA COLLEGE

UPON the resignation of Dr. Wharton, a committee of the Trustees was appointed to " consider and report respecting the office of President." On their recommendation, it was decided that the professorship of moral philosophy, rhetoric and belles lettres, which had previously been held by the President, should be detached from the presidential office, and that thereafter the President should attend the public examinations, preside at Commencement and have merely a general superintendence of the institution. This recommendation was adopted on December 30 ; and on the following day the Rev. Benjamin Moore, S.T.D., a graduate of King's College, of the Class of 1768, was elected President.

Dr. Moore was the son of Samuel Moore and Sarah Fish, and was born on October 5, 1748. He attended



RT. REV. BENJAMIN MOORE, S.T.D.
PRESIDENT OF COLUMBIA COLLEGE, 1801-1811



school in Newtown and afterwards in New York, and matriculated in King's College in 1764. Among his classmates were several who afterwards gained distinction: Gouverneur Morris, who was in 1792-4 Minister to France, and from 1800 to 1803 a member of the United States Senate; John Stevens, the engineer who introduced the railway in America and invented the screw propeller; and Gulian Verplanck, who, although he lived only to the age of forty-eight, was prominent in the politics of the state, was for eight years president of the Bank of New York. After graduating with high honors in 1768, Mr. Moore studied theology under the Rev. Dr. Auchmuty, then rector of Trinity Church, and at the same time gave instruction in Greek and Latin. He went to England in 1774, and in June 29 of that year was ordained to priest's orders by the Bishop of London. Upon his return he officiated in Trinity Church and its chapels, and was subsequently appointed an assistant minister.

In 1775 he was elected President *pro tempore* of the College, on the withdrawal of President Myles Cooper; and after the reorganization of the College he held, from 1784 to 1787, the professorship of rhetoric and logic. His experience and training, therefore, fitted him well for the office of college president, as it was generally constituted in those days; and this consideration, as well as his liberal spirit and the strong personal regard in which he was held by all denominations, led to his selection as President of Columbia College. The fact that he was at the time the rector of Trinity Church and also the Bishop of the State of New York made it a recognized necessity, however, that he should be relieved of all presidential duties except those of the most general character; and he was accordingly elected upon the understanding that he should not be expected to give instruction, as his predecessors had done, and that he should not be responsible for details of administration.

It is somewhat difficult to understand why the Trustees should have selected, as the chief administrator of the College, one whose other official duties so far precluded him from any active participation in the affairs of the College, unless allowance is made both for the personal character of President Moore and for the state of public opinion at the time. Unhappily the spirit of denominational jealousy, which was manifested so fiercely in connection with the founding of the College, still existed to some extent even in 1801, unconverted and unsubdued, even by the complete freedom of opinion in all religious matters which the College had so consistently and effectually maintained. A well informed writer says :

The internal condition of the Board, at this time, in being nearly equally balanced between Episcopal and opposing members, made it a scene of much animated contest, the interest of which was greatly increased by the talents and standing of the gentlemen who composed it; they being among the ablest and most influential men, not only in the City, but in the State and the Union. Among them at the time of Mr. Hobart's entrance into it, [1801], were Alexander Hamilton, Brockholst Livingston, Richard Harrison, Morgan Lewis, Dr. Bond and Dr. Mason; and to these were successively added, as vacancies occurred, Rufus King, Gouverneur Morris, Egbert Benson, Colonel Fish, Oliver Wolcott and Robert Troup.

The claims of the Episcopalians to influence in the Board, based upon the fact that the endowment of the College came from them and upon the conditions of the endowment, were vigorously disputed by the opposition, at the head of which was the Rev. Dr. Mason, of the Associate Reformed Church of Scotland, a man of great intellectual force, powerful with his pen and still more powerful in speech. Bishop Hobart became the spokesman of the Church party. The principle for which he contended, as stated by his biographer, Dr. McVickar, was that in such a body as the Board of Trustees it was highly expe-

dient that all internal questions of contest should be eliminated, in order that the Trustees might be free to attend to their rightful duties as the literary guardians of a seminary of education; that this end was only attainable if one denomination had such a numerical majority as to preclude all party contests; that the denomination which furnished the endowment upon certain conditions was entitled to preponderance in the body which administered such endowment and upon which the conditions were obligatory; that, therefore, whether regarded as a question of expediency or of right, the Episcopalians should hold the majority. To this statement Dr. McVickar adds, as an expression of his own opinion: "Whatever might then be thought of this reasoning, experience certainly proved its soundness. For, until it was adopted, the Board went on disputing instead of acting." Under such conditions President Moore was chosen. He was essentially a man of peace.

In private life he was one of the most attractive of men, a universal favorite with both the faculty and the students [wrote one who was a student under him]. In his bodily appearance he was slender and of but the medium stature. His manners reflected both intelligence and loveliness; there was a grace and dignity and gentleness, without the least semblance of affectation or any attempt to appear condescending or patronizing. In short, he was as fine a model of a Christian gentleman as I remember ever to have met. But if there was any one feature in the character of this venerable man that shone with greater lustre than any other, it was the truly catholic spirit that breathed through his whole conduct. While he was a true, consistent, and I may add, an uncompromising Episcopalian, he was neither an aggressive or prescribing one.

For the time being, the election of President Moore accomplished what was hoped, in that it brought about conditions more harmonious and, therefore, more conducive to the welfare and advancement of the College; but, so

far as it resulted in devolving the active duties of the presidential office upon the several professors in rotation, it appears to have been far from satisfactory from an educational and administrative point of view.

There were at this time one hundred and one students in the College, and the faculty consisted of four professors—namely, Peter Wilson, LL.D., professor of the Greek and Latin languages and of the Grecian and Roman antiquities; John Kemp, LL.D., professor of mathematics, natural philosophy and astronomy, with geography and chronology; John Bowden, S.T.D., of the Class of 1772, who was chosen simultaneously with President Moore, as professor of moral philosophy, rhetoric and belles lettres, logic and the law of nations; and Dr. Samuel Latham Mitchill, who was succeeded in 1802 by Dr. James S. Stringham, professor of chemistry. The Medical Faculty consisted of six professors—namely, Dr. Wright Post, in surgery; Dr. Richard Bailey, in anatomy; Dr. John R. B. Rogers, in midwifery; Dr. William Hamersley, in the practice of medicine; Dr. James S. Stringham, in chemistry; and Dr. David Hosack, in materia medica and botany. The students in medicine numbered about fifty.

In the absence of an effective President, the internal administration of the College seems to have been left entirely to the Faculties, for the Trustees were occupied at the time with the financial exigencies of the corporation. These were very pressing. The total revenue of the College in 1802 did not exceed £1,570, and the salaries of officers amounted to £1,477, leaving but £93 for other expenses and for keeping the buildings in repair. Under these conditions, any extension of the work of the College was impossible; and it was only by strenuous appeals to the Legislature and to individuals, and through the closest economy, that it was possible to maintain the then existing course of instruction and to complete the buildings, already commenced, which had become indispensable.

The experiment of conducting the College with only a titular head was, therefore, continued for several years, but with results which became more and more unsatisfactory. In a report made to the Regents of the University in 1808, the Trustees stated that the administration of the College had been severely and generally criticised; and, while they contended that such criticism was in some measure due to "misconception and misapprehension," they felt called upon to defend themselves with vigor and announced that they had taken steps to rectify whatever "errors and abuses" had "imperceptibly insinuated themselves into the institution." A table showing the attendance of students for upwards of ten years, which constituted a part of their defence, is of interest. In 1798-9, the whole number of students in attendance in the College (other than medical students) was 69; in 1799-1800, 68; in 1800-01, 89; in 1801-02, 101; in 1802-3, 106; in 1803-4, 117; 1804-5, 118; in 1805-6, 105; in 1806-7, 111; and in 1807-8, 119. Professor McVickar, who has already been quoted, presents a rather gloomy picture of the College at this time; and in his opinion the unfortunate condition was largely due to the denominational issue. The subjects of debate that came before the Board at this period, he writes,

were generally of minor interest, relating chiefly to points of discipline or the supply of casual vacancies; but the latter topic always involved a question of principle and made the election frequently a matter of such sharp contest that its very object was forgotten and almost lost. * * * The College sank in reputation as well as in numbers, until at length its very warmest friends almost despaired of its resuscitation. Some laid the blame on the Faculty, some on the Trustees, some on want of patronage, others again on its internal discipline, in having but a nominal and official President. All parties, however, agreed that something must be done, or the College would be forever ruined.

Dr. Mason was one of the College's severest critics. "Inefficiency," said he, "has been the bane of our college

system"; and upon his motion, in February, 1800, the Trustees appointed a committee of investigation, of which he was chairman. The other members of the committee were the Hon. Rufus King, the Rev. John Henry Hobart, the Rev. Samuel Miller and the Rev. John N. Abeel; and they seem to have devoted themselves to their difficult task in an earnest and fair-minded spirit. Dr. Mason was disposed to take a rather severe tone in his report; for he writes to his colleague, Mr. King, after apologizing for his absence from a meeting, "I send also a bit of paper on which I scrawled yesterday morning towards the germ of a report. If you think there is *too much pepper in the pot*, make any reduction which shall appear proper." The italics are the doctor's and apparently his draft was considered too peppery, for the report as printed is an exceedingly temperate and judicial document.

The Faculty, nevertheless, deemed it unjust to themselves and made a somewhat caustic reply; but the immediate effect was the establishment of higher requirements for admission and the enforcement of stricter discipline, especially in the matter of examinations. The same committee of the Trustees was continued, under a mandate to report a system of discipline as well for inciting to laudable emulation, as for preventing and punishing of faults, to be conducted upon a principle of a regard to character; and to revise the existing statutes as far as may be necessary for carrying that system into effect.

In February, 1810, the committee presented a very able report, giving their views upon the principles of education which the College should maintain and the proper method of applying them. The report was accompanied by a proposed course of study for the four years, which marked a great advance, and by a draft of new statutes. The recommendations of the committee were adopted and the Faculty was to a considerable extent reorganized; the payment of students' fees to professors was abolished and

a fee of \$100 per annum for each student was established. The Trustees also prepared an address to the public, in which they called attention to the losses which the College had suffered during and immediately after the Revolutionary War and to its claims upon the city; and, after expressing their belief that the result of their recent action was "to lay a broader basis for sound and thorough education than [as they believed] has hitherto been known in these states," they appealed to their fellow citizens for support in their efforts "to render Columbia College a seat of learning every way worthy of the commercial metropolis of the United States."

The fact that President Moore took no active part in the adoption of these measures is explained by his absorption in his parochial and episcopal duties; but the increased sense of responsibility among the Trustees, which was engendered by the President's incapacity, and the active interest which was evoked on their part were of great advantage to the College. The inauguration of the policy which was so ably outlined by the committee marked the beginning of a new era and this report continued to be a controlling influence until the adoption of still broader measures in 1857. This action also had the immediate effect of reviving interest within the College and of elevating it in public esteem and influence. The execution of these plans, however, demanded the presence of an active administrative; and in May, 1811, President Moore resigned, in order to make room for some one who would devote himself wholly to the College. Ill health also rendered his withdrawal necessary, as he had suffered an attack of paralysis which, recurring during the succeeding years, completely disabled him and resulted in his death, on February 27, 1816, at his residence in Greenwich Village.

The Rev. Dr. Hobart, who had been so long associated with him in Trinity Church and in the Board of Trustees and who succeeded him as bishop, prepared a

memorial sermon of much eloquence and feeling, in which he said of Bishop Moore :

Love for the Church was the paramount principle that animated him. He entered on her service in the time of trouble. Steady in his principles, yet mild and prudent in advocating them, he never sacrificed consistency, he never provoked resentment. In proportion as adversity pressed upon the Church was the affection with which he clung to her, and he lived until he saw her in no inconsiderable degree, by his counsel and exertions, raised from the dust and putting on the garments of glory and beauty.

Dr. Moore must, therefore, be judged rather as churchman and bishop than as President. He accepted the latter office only in response to the call of duty, under conditions which were perfectly understood from the outset, but which of necessity greatly limited his usefulness to the College. The true test of his ability and of his character is to be found in his service to the Church and therein he left a record which does honor both to himself and to his Alma Mater.

JOHN B. PINE

EDITORIALS

The Commencement to be held on June 13th will be the 146th in the history of the College, and the third at the new site. As has been customary of late years, it will take place in the morn-

The Approaching ing in the gymnasium; and the occasion will
Commencement be honored by the presence of Lord Paunce-
fote, Ambassador of Great Britain to the United States, Arthur
T. Hadley, LL.D., President of Yale University and the Hon.
Thomas B. Reed, ex-Speaker of the House of Representatives,
upon whom degrees will be conferred. After the morning ex-
ercises luncheon will be served for the Trustees and their guests
in the President's room and for the alumni in College Hall, the
Engineering Building and West Hall. Luncheon will also be
served in Barnard College.

At half past three the alumni will assemble in the law read-
ing room, and the president of the Alumni Association of the
College will present to the University a portrait of Dean Van
Amringe, which will be accepted by President Low. The por-
trait is to be given by the Association, in commemoration of
Professor Van Amringe's forty years of service as an officer of
the College and of the University. Upon the conclusion of the
presentation, the alumni of the College and of the Schools of
Science will form in procession, respectively, in the east and
west corridors of the Library. Other alumni, officers and in-
vited guests will form in the north corridor; and all will proceed
to the gymnasium, where a general meeting of the alumni will
be held. Dean Van Amringe, the Chairman of the Alumni
Council, will preside, and an address will be delivered by James
H. Canfield, LL.D., the Librarian of the University.

The plan for the construction of a dormitory with private
capital at the corner of Amsterdam Avenue and 116th Street has
been abandoned for the present, owing to the impossibility of

Dormitories obtaining the land upon satisfactory terms.

Again The failure is the more to be regretted as the
enterprise was well planned, a very considerable part of the re-
quisite capital was secured, and the prospect that the building, if

completed, would prove a financial success was excellent. This result, however, gives the University another opportunity to be the first in the field; and, as we stated in our last number, it is our conviction that the ideal site for dormitories is upon the Green, where they will be part and parcel of the University and will contribute in the most effective manner to create a University atmosphere. While there are doubtless other suitable sites in the immediate neighborhood of the University, there is none which in point of attractiveness equals the Green; and the fact that the dormitories, if erected there, will be upon the grounds of the University will in itself add much to their desirability as places of residence. Furthermore, the Green offers the enormous advantage of furnishing the land without cost, if we can but find the liberal and far-seeing individual who will provide the building or buildings, and thereby give to Columbia the one element which is now most essential to her future growth and development.

The official announcement of the first Summer Session of the University, which was issued early in the winter, has attracted a great deal of attention throughout the country. From the

The Summer Session	South and West particularly many inquiries have been received and there is every reason to believe that several hundred students will be enrolled for the various courses offered. The instruction to be given at the Summer Session of 1900 is limited to those subjects for which the demand is believed to be greatest, but in subsequent years its scope will doubtless be much extended. For the present year 30 courses are to be given: 3 in botany, 5 (including practical teaching under supervision) in education; 5 in English, 2 in geography, 1 in history, 2 in manual training, 3 in mathematics, 1 in philosophy, 3 in physics, 2 in physical training and 3 in psychology.
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The advance registration indicates that education, English, psychology and geography—in the order named—will be the most popular subjects. Each student is restricted to not more than three courses, in order to prevent dissipation of energy, and a uniform tuition fee of \$25 has been established. All of the courses may be counted, if desired, toward the appropriate degrees and diplomas; and most of them are accepted by the New

York state and city superintendents of public instruction in partial fulfillment of the legal requirements for teachers' licenses.

From the point of view of university policy, the establishment of a regular Summer Session is in part due to the desire to meet a manifest public demand and in part to test the practicability and advisability of using the great resources of the University, which now lie idle for nearly four months of each year, continuously without other than one or two short interruptions. The experiment will be watched with great interest, both within the University and without.

Columbia University has been chosen, by the Director of the Educational Department of the United States exhibit at the Paris Exposition, as one of the universities which takes part in exhibiting the work of higher education in this country. No one university is allowed to make a complete exhibit, but the entire educational field is divided among certain typical universities.

To Columbia was assigned an exhibition of the work in education (Teachers College), in psychology, in law and in library administration. Teachers College sends a full set of extraordinarily interesting charts, showing the courses of study, the relations of the various parts of the curricula, photographs of interiors and exteriors, and a display of the material work of classes from the lowest grade up. The Law School sends a series of charts which exhibit in a striking way the work of that department. The department of psychology sends charts and photographs, together with a quantity of apparatus used in experiments in physiological psychology. The Library sends a complete set of University publications, and two large and beautiful volumes prepared under the general direction of McKim, Mead and White. The first of these volumes is devoted entirely to the Library proper and the second to other University buildings. The general plan is that of the exhibit made at the World's Fair by the German universities. There is, first, a map of the city of New York, upon which the location of Columbia is clearly indicated. Then follows a map of that portion of the city immediately adjoining the campus—from and including the Grant Mausoleum

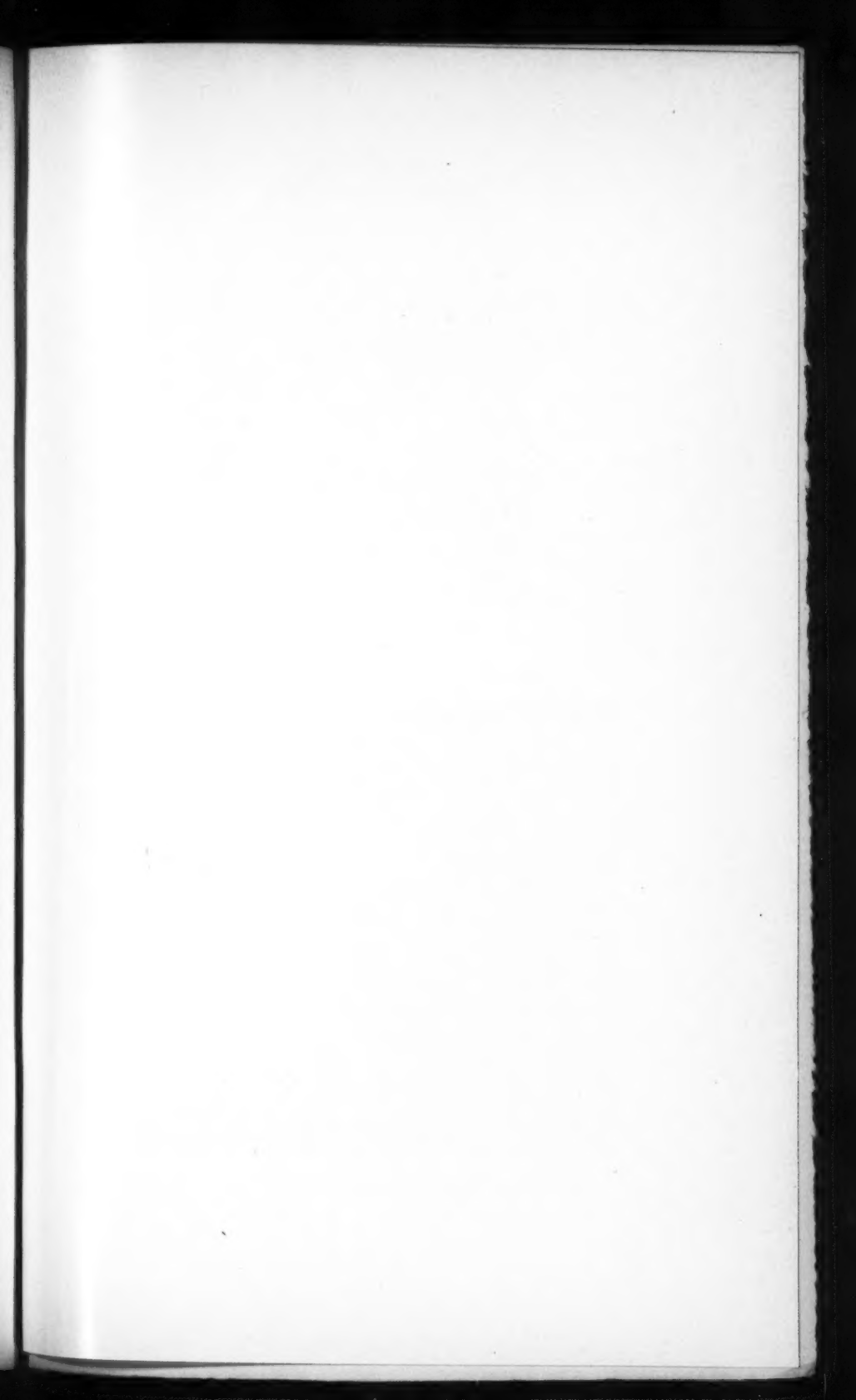
on the north to and including the Academy of Design on the south. Then there is a map of the campus, and following this are architects' floor plans and sectional plans of the different buildings—photographs being used in place of elevations and perspectives. As these photographs are all new and were taken under most careful supervision, they form a notable collection.

In addition to these volumes, the views are repeated on a series of cardboard leaves, or projections, turning out from the wall at the will of the visitor. Large statistical charts are also furnished showing the growth and use of the Library. At the close of the Exposition, the entire exhibit will be returned to Columbia.

The prospects for the establishment of the collegiate course in commerce are now very bright. Just about one year ago the Chamber of Commerce endorsed the plan of coöperation with

The Course in
Commerce

Columbia, as proposed by the Chamber's special committee on commercial education, and passed a resolution authorizing the officers of the Chamber to secure the necessary funds. Owing to the project of the new building fund for the Chamber of Commerce, it was deemed inadvisable to make any such effort last summer or autumn. Now that the building fund is completed, the committee of the Chamber, acting upon the suggestion of the president of the Chamber, is endeavoring to provide permanently for the course in commerce, by securing the assignment to the University of Chamber of Commerce scrip, which is to be issued in return for subscriptions to the building fund, to an amount not less than \$500,000. Good progress is being made. The course in commerce cannot be opened in the autumn, nor until this fund is completed; but, upon this basis, whenever the Chamber of Commerce fund is established in the University, this course will be permanently endowed.





TABLET AT MADISON AVENUE AND
FORTY-NINTH STREET



TABLET AT WEST BROADWAY AND MURRAY STREET

THE UNIVERSITY

Opposite this page appear views of two **commemorative tablets** lately erected by the Trustees. One of the tablets has been placed on the building at the southeast corner of Murray Street and West Broadway, this being the most available place near the site formerly occupied by King's College. The other tablet is upon the Berkeley School building, at the corner of Madison Avenue and 49th Street.

The Trustees have also placed in the hall of the Sloane Maternity Hospital a large bronze tablet bearing the following inscription:

In recognition of the wise liberality of William Douglas Sloane and Emily Thorn Vanderbilt Sloane in building and endowing the Sloane Maternity Hospital for the benefit of humanity and for the advancement of medical education the Trustees of Columbia College in the City of New York have erected this tablet 1900.

* * *

We regret to record the **death of Frederic Bronson**, a Trustee of the University, which occurred on March 29th at Palermo, Sicily, after a very brief illness. Mr. Bronson was graduated from the College in 1871 and from the Law School in 1873. He was elected a Trustee on January 4th, 1897, and as a member of the Board took an active interest in the affairs of the University and served with great efficiency on various committees. A more extended notice of his life will appear in the next issue of the **QUARTERLY**.

* * *

Richard Hovey, who had for two years been lecturer in English literature at Barnard College, died suddenly at the Graduate Hospital, in this city, on February 24, 1900. Mr. Hovey was the son of the late General C. E. Hovey, and was born May 4, 1864, at Normal, Illinois. He was a member of the class of 1885 at Dartmouth College, studied for a year in the New York General Theological Seminary, and was for a time lay assistant at the Church of St. Mary the Virgin. Later he turned his attention to literature and attained some distinction as a dramatist and poet. His *Quest of Merlin*, *Marriage of Guene-*

vere and *Launcelot and Guenevere* appeared in 1891; *Seaward*, in 1893; *Songs of Vagabondia*, with Mr. Bliss Carman, in 1894; *The Birth of Galahad* and *Along the Trail*, in 1898; his last poem, *Taliesin*, in 1899. Mr. Hovey had also translated several of Maeterlinck's plays.

Though not a teacher by profession, Mr. Hovey proved in many respects unusually successful as an instructor. His classes were large, showed much interest in their work and were quick to appreciate the advantages of studying English literature under a lecturer who was himself a man of letters. A critical article on Mr. Hovey's last poem, written by his friend and colleague, Dr. C. H. Page, appeared in the *American Bookman*, for April, and to this the reader is referred for a full and appreciative estimate of his work. The editor of the *Bookman* adds that "his early death is a distinct misfortune to American literature; for, dying as he did at the early age of thirty-five, he may be said to have ended his life-work just as he had reached the threshold of serious achievement." To us it seems that Mr. Hovey never did better work than in his *Dartmouth Ode* and similar poems clustering about his *Alma Mater*, which showed his deep realization of the joys and ambitions of young manhood.

* * *

Professor Rickett's resignation from the professorship of analytical chemistry and assaying, because of ill health, marks the end of twenty-nine years' service in the University; and, in accepting his resignation, the Trustees expressed their appreciation of his long and faithful service. Professor Ricketts was graduated from the School of Mines in 1871. He was at once appointed assistant in mineralogy and held that position until 1877, when he was promoted to the rank of instructor in assaying. In 1885 he was advanced to the rank of professor.

* * *

Professor W. P. Trent, who has just been appointed professor of English literature at Barnard College, took his M.A. at the University of Virginia, in 1884, and subsequently studied history and politics at Johns Hopkins University. In 1888 he was appointed professor of English and history at the University of the South, and has since 1893 been dean of the academic

department there, as well as editor of the *Sewanee Review*, the most important critical journal of the south. Professor Trent has become widely known through his *Life of W. G. Simms*, which appeared in 1892 in the "American Men of Letters" series. Since then he has published several volumes of historical and critical studies, among which his *Southern Statesmen of the Old Régime*, his biographies of John Milton and General Lee, and his *Authority of Criticism and Other Essays* deserve special mention. He has in preparation a history of American literature, which is shortly to appear in Mr. Edmund Gosse's series of "Literatures of the World." Professor Trent has had success and experience unusual for a man of his years, and there is probably no American writer of thirty-five or thereabouts who shows greater promise in the field of criticism and of historical research in literature. His appointment guarantees the organization at Barnard of a department of English of high efficiency. It will also considerably strengthen the corresponding department at Columbia. Professor Trent will give three undergraduate courses in English literature at Barnard College. At Columbia he will give two important graduate courses, involving research in selected fields of English literature.

* * *

By the establishment of a **Collegiate professorship of philosophy** and the election thereto of Dr. Herbert Gardiner Lord, now principal of Franklin School, Buffalo, N. Y., there is assured a noteworthy increase in the efficiency of the department and a strong addition to the effectiveness of the undergraduate teaching. The new professor is to have full charge of the elementary work in philosophy—including psychology, logic and ethics—both in Columbia College and in Barnard College. He will meet his classes in small sections, in order that there may be real teaching, instead of the lecture system, which has crept in insensibly, as the size of the classes has increased. Dr. Lord was graduated from Amherst College in 1871 and from Union Theological Seminary in 1877. He has had an extensive and successful teaching experience, and will be heartily welcomed to the Faculty of Columbia College.

We note with satisfaction Columbia's part in a **valuable educational work** which has lately issued from the press of J. B. Lyon & Co., of Albany. It consists of two large volumes, of nearly 500 pages each, and bears the title *Education in the United States*. Some twenty monographs, dealing with every imaginable phase of the subject, are contributed by eminent American specialists, Professor Nicholas Murray Butler being the general editor. Professor Edward Delavan Perry writes upon "The American University" and Professor James McKeen Cattell upon "Scientific Societies and Associations." An examination of Professor Butler's introduction shows that the monographs, taken together, cover the whole field of education in the United States. Beginning with educational organization and administration, they proceed in logical order from kindergarten to university, including the education of women, the training of teachers, school architecture and hygiene, professional education, scientific, technical, engineering, agricultural, commercial, art and industrial education, the education of defectives, summer schools and extension teaching, scientific societies and associations, education of the negro and of the Indian.

* * *

The new scheme of **requirements for admission**, which was described in the last number of the *QUARTERLY* as applicable to the College, has been adopted in its essential features by the Faculties of Barnard College, Teachers College (for admission to the collegiate course) and the Schools of Applied Science. The salient features of the plan, it will be remembered, are that each subject, elementary or advanced, counts a certain number of "points," and that every candidate for admission is required to secure fifteen points. There are certain restrictions placed upon the candidate's freedom of choice, and these restrictions vary considerably in the several colleges, but the general system is the same for all. This plan has made it possible to unify the entrance examinations of the four colleges in a very simple and satisfactory manner and to place the entire business of conducting Columbia's entrance examinations in the charge of a single University Committee. This committee now consists of Professors Fiske (chairman), Carpenter (G. R.), Wheeler, Hallock, Thomas, Sherman and Dodge.

With the counsel and assistance of the President, who has taken great personal interest in the new system, the committee has already prepared a circular of information relating to the entrance examinations for this year. They are to be held at the same time, in June and September, for all four colleges and in two places: for men in the gymnasium of Columbia University, and for women in the theatre of Barnard College. The same question-papers in each subject, elementary or advanced, will be given to all candidates offering that subject. Candidates for admission, teachers and others who are interested in this matter should procure the above-mentioned circular. Upon receiving a copy, Dr. Skinner, superintendent of public instruction in the state of New York, wrote to President Low a warmly commendatory letter, from which we are permitted to print the following extract:

You have certainly taken a great step forward. The arrangement for admission to graduates of high schools seems to me to be admirable and certainly must be appreciated by young men who desire a university education, but who, unfortunately, go through their high school course without deciding exactly what they would like to undertake. . . . I do not see how you can improve upon your system of entrance examinations. You have reduced them to a minimum and, best of all, there will be a uniform requirement. . . . It is most gratifying to note the broad character of the changes recently made in Columbia University. They are in line with public expectations and will go far to raise college and university training and education in the estimation of our people. I hope that other colleges and universities will follow the great example which you are placing before them.

RELIGIOUS INTERESTS

Chapel.—The plan of having professors give ten minute addresses each fortnight at the chapel service has proved so successful that renewal of it for another year seems certain. The music at the services is rendered by four voices, and is very acceptable. Our organist, Dr. Warren, is untiring in his effort to make the singing at our chapel services devotional and hearty, and in this he has signally succeeded.

The students of the Episcopal Church have recently organized a Church Club, the principal purpose of which is, while not in any way diverting from the interest of the Young Men's Chris-

tian Association, to give to those who desire it instruction in church history and liturgics, and to interest them in the work of missions. Were some liberal person to give the University a chapel building, designs for which have already been prepared and approved, with much needed facilities and proper accessories for public service, the religious work at Columbia University would be very much strengthened. Let Columbia, foremost in other things, not be backward in this most needful thing of all.

G. R. V.

Young Men's Christian Association.—The work of the Association at this time is largely devoted to planning for the next academic year. A special effort is being made to extend and render more efficient our Bible-study department. The importance of this is greatly increased by reason of the fact that Columbia offers no courses in the study of the English Bible. The Association proposes to offer several courses, in order that all the men in the different schools and classes may be able to select hours which will not conflict with any of their other work. The most important course will be the "Studies in the Life of Christ," as prepared by Mr. H. B. Sharman, of the international committee; and two classes will be organized for this study. A second course will be devoted to the study of the Acts and Epistles. If there is a sufficient demand, a third course will be organized for the study of the Old Testament. The classes will be small groups for discussion, and the instruction will be suggestive rather than didactic.

A conference of Y. M. C. A. presidents of the eastern section was held at Yale University, April 12-15. The Columbia Association was represented by the General Secretary. There were present 76 delegates, representing 46 different institutions.

A reception for the students in New York preparatory schools, who enter college this year, was held March 30th. About 150 men go up from the New York preparatory schools to college this year, of whom Columbia will secure 60 to 70 per cent.

The General Secretary's report for 1899 has been printed and distributed among the alumni and friends of the Association. The Association is planning to issue its own Handbook this year, instead of publishing one in conjunction with the other colleges of the city, as heretofore.

An effort is being made to secure a large delegation from Columbia for the Y. M. C. A. summer conference at Northfield, Mass., June 29 to July 9. An attendance of ten delegates is practically certain, and more will probably be secured.

To give the students an opportunity of hearing prominent speakers from outside, it is planned for next year to present a series of addresses setting forth the opportunities and obligations of the various professions, the speakers being men prominent in those professions.

A. B.

THE LIBRARY

The transfer of the order and accession department to the former private office of the Librarian gives that department for the first time in the present building ample room for the transaction of business. This has been highly appreciated by the department and by officers of the University. The latter now have greatly increased facilities; and, with less of the friction due to the former crowded condition, the work of the department has been rendered far more efficient.

Among the more notable accessions since the last issue of the QUARTERLY are the following: Commercial reports and treaties, 25 volumes, presented by Mr. J. R. Planten; Britton's *Illustrated Flora of Northern United States* (4 volumes), presented by Professor Britton; *Deliberations of the Colonial National Congress at Paris* (3 volumes, 1889-92); Guizot's *Collection des Mémoires relatifs à l'Histoire de France* (31 volumes, 1823-35); *Procès-verbal de l'Assemblée des Communes et de l'Assemblée Nationale* (147 volumes); Petrarch's *Opera*, rare old edition of 1581; Henrique's *Colonies Françaises* (6 volumes); Galileo Galilei's *Opere* (8 volumes), presented by the Minister of Public Instruction of Italy; Ponz's *Viage de España* (18 volumes); *Il Manoscritto Messicano Vaticano 3738*, Detto il Codice Rios, reproduction, presented by the Duc de Loubat; also many new books on colonization and on the South African question.

To this list may be added a number of Chinese works lately presented to the Library by Mr. William Barclay Parsons, the well-known engineer. Among these may be mentioned a fragment of a famous historical work (the *History from the Beginning*

of *Time to the Sung-Pan Dynasty*), printed from blocks in the 13th century; an illustrated *Life of Buddha*, published between 1796 and 1820; a copy, dating from the 18th century, of the *Shoh-Wen*, the earliest Chinese dictionary; the *Thirteen Classics*, with commentaries; together with various collections of pictures, seals, inscriptions, etc. Mr. Parson's handsome gift makes an excellent beginning for a Chinese collection.

The increased use of the Library has been remarked by all University people, the record showing that for the first quarter of the current calendar year the reference use of the Library averaged 1137 volumes per week, as compared with 703 volumes per week (average) for the same period last year. This does not include the very remarkable increased use of the reading room, the law library, the seminar rooms and the large collection of special reference books; but it may be taken as a fair test, in one branch of the Library service, of what is occurring in all branches. It will be seen that the average gain is something over 60 %. In fact, however, the gain has been so rapid as to show quite 100 % advance during March.

The work of the cataloguing and classification department has been very extraordinary during the last quarter, and shows the excellent results secured by Miss Prescott in the reorganization of her department. The results are as follows:

New cards added to the catalogue during

	1900	1899
January	7,339 cards	6,002 cards
February	6,383 "	5,113 "
March	7,648 "	4,741 "

THE GYMNASIUM.

The second annual competition, held to determine the fifty strongest men of the University, closed with the month of April and has left behind an interesting set of statistics—interesting because the competition has become an annual event in student athletics which is each year growing more popular and also because the interpretation of the figures affords illustration and proof of the utility of our splendid gymnasium.

The tests were taken according to a system generally known

by the name of Dr. Sargent, of Harvard. They include tests on two dynamometers, one an oval shaped steel spring attached to the ground and used with a bar and chain, the other an ordinary gripping machine. With these are tested the muscles of the back and legs and of the forearms; each kilo registered counts one point. Lung tests are taken on a manometer or on a wet spirometer, but count for comparatively little. The strength of the upper arms and chests is calculated from the number of "dips" and "pull-ups" made. Tests such as these were made of the juniors and sophomores in the College and of the second and third year men in the Schools of Applied Science at the time of their entrance; and the average here was 554.2 points. As the highest number of points required of athletes by the faculty committee on athletics is 700, we have thus a standard by which we may appreciate the extraordinary records made this year. Where possible, the records made last year by men in this year's fifty are given in the first column.

	1899.	1900.		1899.	1900.
1. C. Eastmond-C.	952.4	1407.1	27. G. A. Rappold-S.	789.	1165.
2. V. de La M. Barle-C		1400.1	28. H. H. Boyesen, 2d-C.	765.8	1157.2
3. H. H. Weekes-C.		1388.9	29. L. M. Colwell-S.	784.9	1152.3
4. G. Welles-S.	945.	1367.2	30. G. J. Busck-M.		1150.9
5. N. von Taube-S.		1356.7	31. J. B. Knipe-M.		1148.8
6. H. S. Johnson-C.	684.	1351.	32. R. W. M. Clarke-S.	656.8	1147.5
7. S. P. Nash-C.	1140.	1293.8	33. S. S. Boardman-L.		1146.5
8. B. A. Benziger-L.		1251.2	34. J. E. Higgins-S.	782.	1135.1
9. M. Schwerin-S.		1245.6	35. E. F. Maisenholder-S.	734.4	1134.8
10. P. Coan-C.	549.9	1240.8	36. C. M. Schwerin-L.	522.	1132.6
11. A. L. J. Queneau-S.		1225.4	37. E. H. Eaton-Phil.		1131.9
12. W. C. de Mille-C.	583.6	1224.9	38. C. Engelke-M.		1131.6
13. H. R. Sturtevant-C.	613.3	1224.7	39. E. Schuster-C.	361.	1127.1
14. C. T. Swart-S.	750.	1222.9	40. G. Matthew-Phil.		1121.4
15. C. H. Smithers-C.		1206.8	41. C. S. Marston-S.	566.2	1114.4
16. J. C. Smallwood-S.		1206.3	42. J. B. Wolff-S.	666.	1114.3
17. W. M. Hyman-S.	678.6	1206.1	43. O. W. H. Lillard-S.		1113.
18. J. P. Wylie-C.	589.	1195.	44. R. P. Jackson-C.	566.5	1109.8
19. F. Knowles-M.		1186.8	45. W. R. Planten-L.	740.5	1109.7
20. S. Silbiger-L.	527.6	1184.9	46. F. R. Varela-S.		1109.3
21. R. B. Bartholomew-C.		1177.8	47. F. S. Shaw-S.		1109.3
22. J. de la Fuente-S.	675.	1176	48. H. M. McLintock-C.		1105.8
23. S. Brown-S.	882.	1171.	49. W. B. Boyd-M.	682.4	1003.8
24. L. E. Mahan-C.	658.3	1170.8	50. W. H. Yates-S.		1101.8
25. C. L. Berrien-S.		1170.4			
26. M. W. Norman-C.	765.	1165.	Total,		59489.4

Comparison of these figures with those of last year's fifty shows a phenomenal advance. R. Bigelow, first last year with 1272.5, is this year outdone by no less than seven men. Five men made over 1100 in 1898-99; 33 are able to make that amount now. The fiftieth in last year's list, with 903, contrasts strikingly with Mr. Yates the fiftieth of this year, with 1101.8. Comparing the total strength of the two fifties, we have gained 9305.8 points this year. In the intercollegiate competition for this year, Columbia's total exceeds by over 5000 points that of her nearest rival, Harvard. We have more men in the intercollegiate fifty than all the other colleges combined.

What is most significant, however, in the enormous gains thus indicated is that it can by no means be attributed to accidental causes, but only to an increasingly intelligent and widespread use of the gymnasium. At least 60 per cent. of these men are not athletic in the general acceptance of the word, but preëminently students who have made an intelligent and regular use of the gymnasium facilities solely for the sake of health. They are taken from the rank and file of the University and conclusively demonstrate by their improvement, as indicated above, that the gymnasium is more than justifying the expectations of its founders, by helping the *average* men of the University to better physical conditions.

THE COLLEGE

Attention was called in the last number of the QUARTERLY to the fact that, while Latin would no longer be indispensable for admission to the freshman class, it would continue, as heretofore, to be indispensable for the degree of Bachelor of Arts. The essential difference between the new system and the old is that hereafter elementary Latin *may* be taken as a college study—like elementary French, German, physics, chemistry, zoölogy or botany—and that it *must* be taken by candidates for the A. B. degree who did not present it for admission. To meet the new conditions, certain modifications have been made in the **requirements for graduation** with the degree of A. B.

Candidates for the degree of Bachelor of Arts are required to present courses making a total of sixty points, each point having the value of a subject pursued one hour a week for one academic year, except that laboratory or drawing academy hours

shall be counted for one-half the number of hours actually occupied. Not less than twelve, nor more than eighteen, points may be presented in any one year without the consent of the Dean. No one-hour course, unless taken in connection with and as a supplement to a cognate course, will be allowed. To the end of his Junior year, a student must always pursue not fewer than three courses having a value of at least three points each.

The courses necessary to meet the above requirements may be chosen by the student at will from the courses announced each year, subject to the restrictions named in connection with each course, and to the following general restrictions:

Prescribed

For all students:

Rhetoric **A**, 3 hours—Freshman year.

Rhetoric **B**, 2 hours—Sophomore year.

Psychology **A**, 3 hours—First half Junior year.

Political Economy **A**, 3 hours—Second half Junior year.

For students who do not offer Latin at entrance:

Latin **X**, 5 hours—Freshman year.

Latin **Y**, 3 hours—Sophomore year.

Latin **Z**, 3 hours—Junior year.

For students who do not offer the following subjects at entrance, the courses appearing in connection with them, respectively:

French:

French **A**, 3 hours—Freshman year—unless French I be chosen.

German:

German **A**, 3 hours—Freshman year—unless German I be chosen.

A Natural Science:

Botany **I**, 3 hours—Freshman, Sophomore or Junior year, or

Chemistry **I**, 4 hours—Freshman, Sophomore or Junior year, or

Physics **I**, 3 hours—Freshman, Sophomore or Junior year.

Advanced Mathematics:

Mathematics **A**, 3 hours—Freshman year.

Advanced History:

History **A**, 3 hours—Freshman or Sophomore year.

SCHOOLS OF APPLIED SCIENCE

School of Architecture.—The chief matters of recent interest are the close of the sixth competition for the Columbia Fellowship, of the value of \$1300, founded by the Trustees in recognition of the liberality of Mr. F. A. Schermerhorn, and the completion of the graduating thesis-designs. The competitive drawings for the fellowship were handed in on Saturday, April 28, except those by graduates resident abroad, which at the time of this writing are on their way to New York. The subject of the competition is "A monumental fountain with cascades in Central Park," and the prize is to be awarded by the jury of the Municipal Art Society. There are seventeen competitors, graduates of this school, six of them at present studying in Paris.

The subjects of the thesis-designs are quite as varied as in any past year. They include: an executive mansion in a state capital; a summer hotel and health resort (two theses); a monumental country house or villa, with landscape gardening (three theses); a gothic church; an immigrant landing-station; a railway terminus; an art school and museum; a large high school building; a public library; a Y. M. C. A. building; a general hospital (two theses); a block of three city houses. This year each graduating student will be required to prepare, in addition to the usual plans, elevations and sections, a large detail, fully rendered in color and completely figured.

Professor Hamlin addressed the Woman's Club of Brooklyn, April 23, on "How to make Brooklyn beautiful." The address made by him last December before the League for Political Education, on "Architecture and civic duty," has been published in full in *Public Improvements*, the number for April 16. On May 2 he lectured before the Brooklyn Institute on "Exposition architecture."

Two lectures on Michael Angelo given on April 3 and 10, by Mr. E. R. Smith of the Avery Library, in the large lecture room of Havemeyer Hall, were well attended not only by the Columbia students of architecture but also by a considerable delegation from Barnard and Teachers Colleges. Both the substance and the illustrations—which were of exceptional beauty—were highly appreciated.

A. D. F. H.

Department of Analytical Chemistry and Assaying.—An article on the ferrocyanide titration of zinc, by E. H. Miller and E. J. Hall, was read by Dr. Miller at the April meeting of the New York Section of the American Chemical Society and published in the *School of Mines Quarterly* for April.—Dr. Sherman, working in conjunction with Mr. P. B. Hawk, of the U. S. Department of Agriculture, has completed the investigation, begun last summer, of the elimination of nitrogen, sulphates and phosphates following the ingestion of proteid food. The results will appear in the May number of the *American Journal of Physiology*.—Dr. Jouet has nearly completed his bibliography of thorium and its salts, which he has been preparing for three years for the Smithsonian Institution.—Mr. Fisher is investigating the composition of lead ferrocyanide precipitated under different conditions.—Mr. Hogarty is working on the assay of zinc blends for silver, comparing the different methods, in order to determine which causes the minimum loss in the slag.

Department of Industrial Chemistry.—Mr. S. A. Tucker, tutor in industrial chemistry, and Mr. H. R. Moody, a graduate student who is working for the doctor's degree in this department, have nearly completed an investigation of the electrolysis of calcium chloride solutions, with reference to the formation of chlorate. They expect to read a paper on the subject at the next meeting of the New York Section of the Society of Chemical Industry.—On April 21st, Mr. Tucker lectured on "Electric furnaces" before the Cooper Union Chemical Society and demonstrated before the audience Moissan's method for the formation of artificial diamonds.

Department of Organic Chemistry.—Mr. Bogert and Mr. Gotthelf are continuing their investigations upon the quinazolines. They have already presented a paper before the New York Section of the American Chemical Society, entitled "A new synthesis in the quinazoline group," which has recently appeared in the *Journal* of the Society. The synthesis referred to is a very interesting one, by which ketodihydroquinazolines can be produced direct from orthoamido acids, and appears to be one of the simplest and most widely applicable methods of obtaining these compounds yet discovered.—Mr. Bogert has lately

succeeded in the synthesis of the same bodies from the ortho-amido nitriles, a reaction fully as important as the preceding; and is now engaged in attempting to prepare the cyclopentadiazenons from the alpha-amido acids by a somewhat similar reaction. Certain of the quinazolines are useful medicaments (as *e. g.*, orexine), and the production of new members of this series by the syntheses just mentioned may lead to the discovery of other valuable drugs.—Mr. Bogert has also demonstrated in the laboratory the possibility of producing bibasic imides from the corresponding nitriles, by the action of water assisted by a little mineral acid.—The following additional researches are being conducted by advanced students. "Antipyrin," by D. C. Eccles, and "Nitrophthalic acids," by L. Boroschek.

M. T. B.

Department of Electrical Engineering.—The two sets of compound dynamos and motors (DC) purchased from the fund of \$2,500 (see the *QUARTERLY* for March) have been received and are nearly ready for operation. A number of alternating-current instruments have also been purchased, thus affording increased facilities in the alternating-current laboratory.

Some of the investigations now in progress, with reference to graduation theses, are as follows: Tests on magnetic circuit breakers; tests on the resistance and friction of dynamo brushes; design of a power transmission system; tests on core losses and armature reaction of an alternator at various loads; method of standardization of measuring instruments.

G. F. S.

SCHOOL OF POLITICAL SCIENCE

Department of Economics.—Since the recent reorganization of the work in economics, there has been a marked increase in the number, as well as in the quality of the students. Numbers, indeed, constitute no adequate test of the real work done by the various departments within a university; for the subject which attracts the fewest students may possess the highest scientific value and may be presided over by the ablest professors. But, when an institution is compared with others of about the same grade and size, the relative number of students in any one department affords a fair indication of the importance to be assigned to it. Hence, the following table is of much interest:

Graduate* Students (male) in attendance in 1899-1900.	Columbia.	Chicago.	Cornell.	Harvard.	Johns Hopkins.	Pennsylvania.	Princeton.	Wisconsin.	Yale.
Entire or major work in Economics and Social Science. . .	75	40 ¹	14 ²	8	20 ³	17	5	18	25 ³
Primarily registered in Political Science (including History, Public Law and Economics) .	114	99	54	52	20	31	—	40	52

¹ Attending for three terms.

² Including Economics and Public Law.

³ Including Economics, Politics and History.

The number of graduate students in economics and social science at Columbia is much greater than the number in any other American institution. If we compare Columbia with six Eastern universities,—Johns Hopkins, Harvard, Yale, Cornell, Pennsylvania and Princeton,—we find that Columbia has almost as many such students as all six, that is, 75 as against 89. And if it were possible to separate the students working primarily in economics at Johns Hopkins, Yale, and Cornell (where the figures include other students in political science as well), it is practically certain that Columbia would be found to possess more graduate students working primarily in economics and social science than the other six institutions together. Assuming that half of the students returned in Johns Hopkins, Yale and Cornell are working primarily in economics,—a very liberal assumption,—we should have a total of 60 in the six Eastern universities, as against 75 in Columbia. This is a remarkable showing.

In order that it may not be supposed that the basis of classification varies, it may be added that each of the students at Columbia is enrolled primarily under the Faculty of Political Science and is a candidate for the master's or doctor's degree, with the major subject in economics and social science. Every such student is required to attend a seminar. In addition to the seminar, 35 of the 75 students are taking 3 or more courses in economics or social science and 20 are taking 2 such courses. The remainder, who are taking one course in addition to the

* By graduate student is meant a student holding a first degree.

seminar, are chiefly students who have taken most of their lecture work in previous years.

The following figures, as to enrollment in economics and social science, will prove instructive:

Graduate students, primarily enrolled in political science, taking graduate courses (whether as a major or minor).....	95
Graduate students (male) in the whole university taking graduate courses.....	123
Non-graduates (male), primarily registered in political science, doing chief work in economics.....	22
Students, graduates and non-graduates (male, but exclusive of seniors and other college students) in the whole university, taking graduate courses.....	149
Enrollment of students, as above (not deducting duplicates), in graduate courses in economics and social science.....	559
Enrollment of under-graduates in Columbia College.....	179
Enrollment of students of all kinds (male) pursuing these studies	738
Enrollment of Barnard students.....	140
Total enrollment in the University.....	878

The relative importance of the university work may also be seen by this comparison with Harvard:

	Harvard	Columbia
Total students primarily registered in non-professional (graduate) schools.....	341	331
Total graduates in non-professional (graduate) schools.....	323	292
Total graduates in political science	52 or 16%	114 or 39%
Total graduates primarily in economics and social science.....	8 or 2½%	75 or 26%

This showing is doubtless due in part to the system on which the work in economics and social science at Columbia is organized. The department has four full professors, one instructor and two lecturers. The work has been so apportioned that each professor devotes himself primarily to his own specialty—Professor Mayo-Smith to statistics and practical economics, Professor

Clark to economic theory, Professor Giddings to social science, and Professor Seligman to economic history and finance. Another explanation of the large numbers is the facility afforded to students to combine with their studies in economics the courses in history, public law and general political science.

Among the recent graduates in economics of the School of Political Science, no less than 25 are now giving instruction in economics at other institutions, including Yale, Cornell, Amherst, Bryn Mawr, Smith, Syracuse, the Universities of Illinois, Indiana, and Colorado, and the Massachusetts Institute of Technology. A number of graduates have become editors of important daily or weekly papers, in New York, Buffalo, Omaha and other cities, and a large number occupy administrative positions in the service of the national and state governments. Among the latter may be mentioned one of the chief statistician in the census office, a number of expert agents and chief clerks in the departments of the treasury and of agriculture in Washington; and the deputy commissioner of labor statistics and the sociology librarian in the State Library at Albany.

E. R. A. S.

SCHOOL OF PHILOSOPHY.

Department of Anthropology.—During the past year a considerable amount of research work has been done in the department, most of it in connection with expeditions undertaken by the American Museum of Natural History. Professor Boas has edited a manuscript by James Teit, entitled "The Thompson Indians of British Columbia," which has appeared as a "Memoir" of the American Museum of Natural History.—Dr. Farrand has published in the same series a paper on the basketry designs of the Salish Indians, and has finished another paper on the mythology of the Chilcotin Indians, which is soon to appear.—Early in the year Mr. John R. Swanton completed an investigation on the verb of the Chinook language, which he presented as a thesis for the degree of Ph.D. at Harvard University, and which has been published in the *American Anthropologist*. After completing this work, Mr. Swanton devoted much of his time to a study of the Siouan language, for which purpose he spent several months among that tribe. After his return in the fall of 1899,

he undertook to revise and edit a long series of Siouan texts which were written down years ago by a young Siouan Indian. It is expected that this work, when completed, will be published by the Bureau of American Ethnology.—Mr. Alfred L. Kroeber has published a description of the Smith Sound Eskimo, based on material obtained from a few individuals of that tribe who were brought to New York City by Lieut. R. E. Peary. Later Mr. Kroeber has undertaken a study of the Arapaho Indians, whom he had visited during the summer of 1899. A preliminary result of his investigation is a paper on the symbolism of the Arapaho Indians, published, like the first mentioned paper, in the *Bulletin* of the American Museum of Natural History. Mr. Kroeber has been appointed curator of anthropology at the Museum of the California Academy of Sciences at San Francisco.—Mr. Roland B. Dixon, who was a student of Columbia during the year 1899, carried on, in connection with his work here, researches on the Indians of California. His field-work was also done under the auspices of the American Museum of Natural History, and the linguistic results of his researches among the Maidu Indians form the subject of his thesis for the degree of Ph.D., which is being presented at Harvard University.

In connection with the work of the department, a series of meetings was held, in which general linguistic subjects were discussed. The papers presented at these meetings, in which all the members of the department took part, were as follows: Mr. W. Bogoras, "The language of the Chukchee"; Mr. W. Jochelson, "The language of the Yukagheer"; Dr. Berthold Laufer, "The language of the Aino"; Professor Boas, "The languages of the Salish Indians"; Mr. Swanton, "The language of the Chinook Indians."

F. B.

Department of the Germanic Languages and Literatures.—The statistics of the department for the current year show an unprecedented attendance upon its courses. The total enrollment for 1897-98 was 239, men and women; for 1898-99 it was 296; for the present year, 382. Of this last total number 82 are instructed at Barnard College, leaving 300 students, men and women, in attendance at Columbia upon the seventeen courses (including the seminar) given this year by the department. In

this number the classes are represented as follows: freshmen, 82; sophomores, 64; juniors, 35; seniors, 19; with 15 special students in addition. Primarily in the faculty of philosophy there are 38 registrations; in political science, 8; applied science, 16; pure science, 1. In the elementary language courses there are 212 students; in the advanced courses, literary and linguistic, 82; in the Germanic seminar, 6.

The departmental circular announces one new course, 21, Middle High German, which will hereafter alternate with Old High German, but will not be given until 1901-1902. With the course, given each year, on the history of the German language, which has the development of the modern language particularly in view, as a preliminary, these two courses in the older periods will now provide an opportunity for a thorough consideration of the purely linguistic side of German in all phases of its history. The course in Gothic, which has hitherto been given in alternate years, will hereafter be offered each year. In course 20, lectures in German on the history of German literature in the 19th century, particular attention will be paid next year to the literature of the drama during the period under review.

Of the new courses offered for the first time this year, course 19, arranged especially for teachers, upon methods of teaching German and the organization of German instruction in secondary schools, was attended during the first half-year, when it was under our auspices, by six students. Dutch has now been made a permanent part of the work of the department but, owing to the exigencies of the case, can be offered only every third year. It is hoped that some alumnus of the University of Dutch descent, of whom there are many on the rolls, or some citizen of the community of similar antecedents, may yet come forward to place this subject of the Dutch language and literature on a proper footing.

The public lecture course in the German language on popular subjects, delivered by various German-speaking citizens of New York, who have generously given their services, has again served as a most useful supplement to our courses in German, since it furnished a desired opportunity to hear German spoken by a variety of people on a variety of subjects. These lectures are largely attended by teachers of German in the schools of the

city, as well as by the general German-American public. The sum of \$1000 has already been contributed by a citizen of New York toward a permanent endowment fund in support of this course, and it is hoped that a sufficient amount will ultimately be secured to ensure its annual delivery.

The lecturers and their subjects in 1900 were as follows: Rev. Dr. Gustav Gottheil, *Am Eingange des Jahrhunderts*; Mr. Charles A. Bratter (foreign editor of the *Staats-Zeitung*), *Sprachsünden der Deutsch-Amerikaner*; Professor Franz Boas, *Mythen der Naturvölker*; Dr. Julius Sachs, *Das Geistesleben der deutschen Universitäten in den sechsziger Jahren*; Mr. George von Skal (managing editor of the *Staats-Zeitung*), *Berechtigung, Schwierigkeiten und Errungenschaften der deutsch-amerikanischen Presse*; Rev. Dr. August Ulmann, *Das Oberammergauer Passionsspiel (Illustriert)*; Mr. Rudolf Cronau, *Zwei und ein halb Jahrhunderte deutschen Lebens in Amerika*; Mr. Louis Viereck (late member of the German Reichstag), *Erinnerungen aus dem deutschen Reichstage*; Mr. Sadakichi Hartmann, *Das japanische Theater*; Emil A. C. Keppler, A.M., *Bürger, ein deutscher Vorgänger William Wordsworths*.

The cordial thanks of the department are due to Herr Heinrich Conried for an opportunity to hear an exceptionally fine performance of Goethe's "Iphigenie," which was given on March 21, at the Irving Place theatre. Preparatory lectures were given on the two preceding days by Professors Perry and Thomas. Herr Conried's generous invitation was accepted by some three hundred and fifty students of German, who will long remember the occasion. No one who was present will ever again think of Goethe's beautiful play as lacking in dramatic vigor.

An urgent need has developed itself in the necessity for a departmental library, in direct connection with the advanced work of the department. A room has been placed at our disposal in West Hall, and it is hoped that its now almost empty shelves may soon be filled.

W. H. C.

Department of Indo-Iranian Languages.—At the annual meeting of the American Oriental Society in Philadelphia, April

19, 20, 21, papers on Sanskrit, Avestan and Persian subjects were presented by Messrs. J. E. Abbott, L. H. Gray, Montgomery Schuyler, Jr., A. F. J. Remy, graduate students in the department, and by Prof. A. V. W. Jackson. A senior, Mr. H. H. St. Clair, Jr., who has been doing special work in Indo-Iranian, was elected a member of the Society.

The department has completed arrangements for an Indo-Iranian Series, which will be issued among the publications of the University Press. The first number will be *A Sanskrit Grammar for Beginners*, by A. V. Williams Jackson; the second, *Indo-Iranian Phonology*, with special reference to the middle and new Indo-Iranian languages, by Louis H. Gray; the third number will be a *Bibliography of the Sanskrit Drama*, by Montgomery Schuyler, Jr.

A. V. W. J.

Department of Music.—The rapid growth of the department, since its foundation in 1896, can be seen from the following table:

	1896-7	1897-8	1898-9	1899-1900
Number of officers	1	1	2	3
Number of courses	3	4	7	9
Attendance on courses	37	47	127	247
Volumes in departmental library (about)	100	250	350	500

It is expected that during the coming year two new courses will be added—one in free composition, the other in advanced dictation.

E. A. McD.

Department of Philosophy and Psychology.—Important changes are to be made in the courses offered for the coming academic year. Psychology A, which is the required course in elementary psychology for the degree of A.B., and has heretofore been given three hours a week by lecture for one-half year, will hereafter be given in four sections, each reciting three hours a week, the lectures being superseded by text-book work and discussion. The size of this class has become such as to render this change imperative. The introductory course in ethics, which has taken two hours a week and has been open to seniors in the College, will hereafter take three hours a week for the second half year, and will be open to juniors and seniors.

Professor Butler announces a new course, to be known as Philosophy 12, which is a practicum on selected topics in modern philosophy, principally taken from the writings of Hegel and Herbart. This course is planned to meet the needs of advanced students of educational theory, as well as those of advanced students of philosophy. Professor Hyslop announces two new courses, one on metaphysics to be known as Philosophy 13, occupying two hours a week, the other a philosophical practicum of two hours a week on the philosophy of Herbert Spencer. The philosophical seminar for 1901-1902 will be conducted by Professor Hyslop, and the subject for discussion will be the philosophy of Aristotle. Professor Butler's course on the principles of education, Education 2, which this year has been attended by 175 students, will continue to be given two hours a week, but a third and optional hour will be added, which may be taken to give the student the credit of a three-hour course.

For the first time, the divisional circular contains a statement of the courses in ethics and the philosophy of religion which are given at Union Theological Seminary by Professors T. C. Hall and Knox, as these courses may be taken by students of the university. In psychology Mr. Strong offers two new courses, one on the psychology of the mind and the other a research course in analytical psychology.

The total attendance on the courses given in the division of philosophy and psychology during the present year has been 514, as against 171 five years ago.

Harlan Updegraff, now superintendent of schools at Knoxville, Iowa, succeeds Dr. George B. Germann, as assistant in philosophy and education for 1900-1. Mr. Updegraff received his degree of Ph. B. from Cornell College, Iowa, in 1894 and that of A. M. from Columbia University in 1898.

N. M. B.

SCHOOL OF PURE SCIENCE

Department of Astronomy.—Professor Rees has been appointed international juror at the Paris Exposition, in the department of astronomical instruments and instruments of precision. On April 17th, Professor Rees delivered a lecture before the Quill Club of New York on "Telescopes: their development and wonderful revelations."

The department announces a new course in astronomical spectroscopy, by Dr. Mitchell.

J. K. R.

Department of Botany.—Twenty-five years ago botany appeared occasionally on the lists of undergraduate electives, as a course for a half year or less, but the subject was scarcely regarded in a serious light. In fact, at that time there were only two or three colleges in the country where a distinct department of botany was maintained. Most of the instruction consisted in setting apart for a memory exercise a series of descriptive terms, covering the gross structure of the higher plants, combined with some practical work in the dissection of a few flowers, preparatory to tracing their names by means of an analytical manual. The compound microscope as an instrument of instruction, or even of research, was practically unknown; the microtome was not yet invented; the plant was never thought of as a living sensitive being, but only as a cadaver to be pulled to pieces and named. This same idea of the study of botany is, unfortunately, still prevalent in the minds of many educated men.

The study of plant structure, of plant physiology, nutrition; relation to light, heat, moisture and other physical agents; plant sensations and plant movements; the chemistry, physics and mechanics of growth; the methods of reproduction; the evolution of plant life from simple to higher forms; the relations of plants to each other and to their environment; plant biology; the relations of plants to man in the myriad products he derives from the plant world, as food, drugs, fibre plants, oils, essential and fixed, resins, gums, timber and the like—these, in their first principles, are now the subjects covered by the college undergraduate in his course preparatory to research. The plant is studied as a living thing, and the subject is treated as an essential part of biology. For this undergraduate work the present equipment in Schermerhorn Hall, with the additional facilities under construction, places the department in an excellent position to secure the best results.

But to this general work must be added the study of special problems, along some one of the many lines of research in which botanical investigation is now proceeding. For the prosecution of this research work in botany, the University has recently entered into a new relation, by means of which its facilities have been more than doubled. Instead of the seven research courses here-

tofore offered, the department is now enabled to offer twenty-one courses, covering a wide array of special subjects from which the graduate student may select his work. By the contract entered into between the University and the New York Botanical Garden, depositing our botanical collections and library and receiving therefor such facilities as are necessary for the prosecution of research work, the department enters a broader field; and before it open up possibilities which, without this arrangement, could only have been hoped for after tedious years of slow development. The transfer of the graduate work in botany to Bronx Park has already been attended with good results, as follows:

1. The increase, already noted, in the number of subjects from which the graduate student may choose his work.

2. The corresponding increase of the number of specialists directing investigation. Next to the return of some of the research courses to the direction of Dr. Britton, is the addition to the Garden staff of Dr. D. T. MacDougal, whose well-earned reputation in the direction of plant physiology adds very materially to the advantages indirectly accruing to the department. In effect, the botanical staff has been more than tripled in number, with a corresponding increase in special subjects offered.

3. The advantages accruing to students from being able to work where research on a wide scale is in progress, and in a place free from interruption.

4. The advantages of a larger library and more extensive collections. Already these have been increased by half, and the means are in hand so that they will soon be doubled.

5. The opportunity to work with a better equipment, combining: (a) more extensive and better equipped laboratories; (b) facilities for the direct study of a wide array of growing plants, under native and cultivated conditions in the forest preserve, the herbaceous grounds and other plantations and the extensive conservatories. Already more than 3000 species of plants are under cultivation at the Garden.

These facilities are comprised in a tract of 250 acres, which includes forest, meadow, bog and aquatic vegetation, together with easy access to a marine flora (Pelham Bay); extensive museums, illustrating, on separate floors, plants as related to man (economic botany) and plants as related to each other (taxonomic

botany); a laboratory 308 feet long and from 50 to 90 feet wide, with provision for future enlargement; and one of the largest conservatories in America.

A special circular will be issued this year, including a statement of the new courses and facilities in botany at Columbia.

Mr. Tracy E. Hazen, fellow in botany, has for his thesis for the doctorate a revision of certain of the families of the Convolvaceae a difficult group of filamentous algæ mostly inhabiting fresh water. It will be published in the *Memoirs of the Torrey Club*. Mr. Hazen has collected extensively in this group and has given a large amount of critical study to these and allied forms.—Mr. David Griffiths, University scholar, has practically completed a monograph on the fungus family Sordariaceae which will form his thesis and which will also appear in the *Memoirs of the Torrey Club*. The group is one that by careful effort can be cultivated in the laboratory, and the forms grown by Mr. Griffiths have been derived from material from all over the United States, so that it will fairly represent our flora in this family.—Mr. H. J. Banker has been at work on the central-stemmed members of the genus *Hydnum* and will present a preliminary revision and synopsis of the group as a master's thesis.

L. M. V.

Department of Mineralogy.—The museums of a great university should be designed primarily to illustrate and supplement the regular courses of instruction and furnish material for original work. In the study of a natural science the museum is even more important than the library, and its completeness and perfection are to a great degree indices of the grade of work carried on.

The museum attached to the department of mineralogy was, by action of the Trustees on Feb. 5th, named the Egleston Mineralogical Museum, in honor of the late Professor Egleston. This museum dates only from 1864, when the four small collections of N. F. Moore, President of Columbia from 1842 to 1849, James Renwick, professor of philosophy and chemistry at Columbia from 1820 to 1853, Mr. Hale, editor of the *Commercial Advertiser*, and Mr. Gilmore, of Baltimore, were combined into a working collection of 3000 to 4000 specimens for the new School of Mines. By exchanges, gifts and purchases the new museum rapidly increased in size: in 1880 it contained 13,000

specimens; in 1890, 19,000; and in 1900, about 30,000 specimens, these representing the picked residue of probably 100,000.

For the original purpose, the instruction of students in mining engineering, good typical specimens of economic minerals were more important than specimens of rare species or varieties or highly modified crystals, and such specimens when obtained were simply intercalated in the economic collection. With the growth of the university idea and the development of university courses, the inadequacy of this economic arrangement became more apparent, and in planning for the new site radical changes were made. The economic collection was still maintained, by the setting aside of about 5000 specimens of the minerals used as ores, for building materials or in chemical industries; but with the remainder a systematic collection was formed, designed to illustrate under each known species all definite varieties, all crystalline forms, all important variations in character and occurrence and all important localities. Furthermore, the effort was made to secure for this representation the most perfect material possible. Great care was taken to allot space to each group in proportion to its importance rather than to the stock in hand, the ratios being obtained by averaging the allotments in the museums at South Kensington, Berlin and Vienna.

In addition to this, since the instruction in crystallography is under the department of mineralogy, it was planned to develop a special crystallographic collection, to include crystals of both minerals and salts, representing all known types of symmetry and all laws and characters of crystals. Several minor collections—such as an “introductory collection,” illustrating definitions, laws and terms; a “dynamic collection,” illustrating genesis and alteration; and a collection of artificial minerals, illustrating mineral synthesis—were also planned.

This natural and desirable development does not necessarily imply that a larger space would be needed than is now available, as much of the material would be kept in drawers for reference and comparison. It does imply, however, a very large amount of labor, such as the working over of the specimens in hand, the careful preparation of locality lists, the exchange of quantity for quality, the replacement of unsatisfactory minerals and the purchase of missing material.

With the present force this development would be very slow, but with a proper endowment fund the Egleston Museum could be made to rival in scientific value the collections of the Old World. The income from an endowment fund of \$50,000 would secure a permanent curator and leave sufficient for the purchase of specimens and the necessary expenses of development. With the income from \$25,000 the work would proceed more slowly, with merely clerical assistance.

A. J. M.

Department of Zoölogy.—The teaching facilities in this department have been greatly increased during the present year, by the acquisition of new apparatus, models and specimens, which have been purchased from a fund generously contributed for this purpose by a friend of the University. The pressing need for further equipment of the new laboratories has been increasingly felt during the past two years, and has now in a measure been met through the aid of this timely gift. The new apparatus includes microscopes, microtomes, paraffin baths and accessory apparatus, neurological and embryological models in wax, a large number of lecture-charts and microscopical preparations, and a large Zeiss microphotographic and projection apparatus of the latest and most approved model. By means of the latter, not only lantern slides and microscopical sections, but also living animals, can be projected upon the screen; and the structure and habits of even very minute forms of life can thus be demonstrated.

The teaching collection has been increased by many new anatomical preparations, including delicate dissections, injected specimens of rare forms and the like. Among the valuable special material acquired may be mentioned specimens of the animals of the pearly nautilus, from the south Pacific, a rarity of great interest received from Dr. Arthur Willey, of London, who was formerly a tutor in the department. A large consignment of rare Australian forms has also been received, including embryological material of great value. Of especial interest and rarity are embryos and eggs of the Echidna and adults of both this form and the duck-billed Platypus, representing the lowest type of mammals which lay eggs like birds or reptiles. The collection also includes larvae of the lung-fish *Ceratodus*, the study of which is expected to yield important results, and adults and embryos of a number of Australian marsupials.

In February an interesting course of lectures on regeneration and experimental embryology was given by Professor T. H. Morgan, who has in preparation a volume on this subject for the "Columbia Biological Series."—Among recent publications from the laboratory may be mentioned six papers which occupy the entire number (272 pp.) of the current issue of the *Journal of Morphology*. Five of these are dissertations submitted for the degree of Doctor of Philosophy, including that of Nathan R. Harrington, who died in the Soudan, in July, 1899, while in charge of the Columbia zoölogical expedition to the Nile.—The preceding number of the same journal contains the excellent dissertation of Bradney B. Griffin, formerly fellow in zoölogy, who like Mr. Harrington did not live to receive his degree.—Professor Dean's elaborate monograph on the embryology of the California hag-fish, which has recently appeared in the *Festschrift* of von Kupffer's seventieth birthday, contains many new results of great interest to comparative vertebrate morphology.

The study department of the American Museum of Natural History in vertebrate palæontology has been greatly improved by the setting aside of a special room for Columbia students, where there are facilities for quiet work and ready access to the literature. The department is building up a full library, so that its advantages for students of vertebrate palæontology are constantly increasing. Four graduates are this year pursuing a course upon the history of the fossil mammals, and there have been several applications for the course for next year. The Zoölogical Park, and especially the collection in the reptile house and water-bird house, are being utilized by the graduate students in comparative zoölogy.

Professor Osborn has recently been elected a corresponding member of the Geological Society of London, also a member of the National Academy of Sciences. He has been invited to succeed the late Professor Cope as vertebrate palæontologist of the Geological Survey of Canada, but has not yet accepted the position. Professor Osborn has recently given two lectures upon the Zoölogical Park in the "Peoples' Course" under the Department of Public Education.

E. B. W.

BARNARD COLLEGE.

The organization of the **teaching staff** of Barnard under the new system that goes into effect next year is as follows :

Faculty

Seth Low, LL.D., President.
James H. Robinson, Ph.D., Acting Dean and Professor of History.
Thomas R. Price, M.A., LL.D., English Language and Literature.
Edwin R. A. Seligman, Ph.D., Political Economy and Finance.
Herbert L. Osgood, Ph.D., History.
William Hallock, Ph.D., Physics.
George R. Carpenter, A.B., Rhetoric and English Composition.
Franklin H. Giddings, Ph.D., Sociology.
John B. Clark, Ph.D., LL.D., Political Economy.
James R. Wheeler, Ph.D., Greek.
Frank N. Cole, Ph.D., Mathematics.
Calvin Thomas, A.M., Germanic Languages and Literatures.
Carlo L. Speranza, A.M., B. ès L., Romance Languages and Literatures.
William P. Trent, A.M., LL.D., English Literature.
Mortimer L. Earle, Ph.D., Classical Philology.
Nelson G. McCrea, Ph.D., Latin.

Instructors

Arthur M. Day, A.M., Political Economy and Social Science.
William T. Brewster, A.M., Rhetoric.
Herbert M. Richards, S.D., Botany.
Henry E. Crampton, Ph.D., Zoölogy.
Charles Knapp, Ph.D., Classical Philology.
Margaret E. Maltby, Ph.D., Chemistry.

Tutors

William S. Day, Ph.D., Physics.
Henry J. Burchell, Jr., A.M., Classical Philology.
Louise B. Dunn, A.M., Botany.
Edward Kasner, Ph.D., Mathematics.
Rudolf Tombo, Sr., Ph.D., German.

Lecturers

Henry Bargy, A.M., Romance Languages and Literatures.
William A. Nitze, A.B., Romance Languages and Literatures.
Charles L. Raper, History.

Assistants

Wilhelm A. Braun, A.B., German.
Eleanor Keller, A.B., Chemistry.
Jeannette B. Gillespy, A.B., Rhetoric.
Grace Andrews, A.M., Mathematics.
Ada Watterson, A.M., Zoölogy and Botany.

At their first meeting the Faculty chose Professor Earle for Secretary. The only member of the new Faculty who has not previously served on the Columbia or Barnard Faculties is Professor Trent, whose scholarly work and wide reputation make the appointment a cause for warm felicitation to the College. Professor Trent at present holds the chair of literature at the University of the South, Sewanee, Tenn.

With the exception of Miss Maltby, the women appointed are all Columbia graduates. Miss Maltby is a graduate of Oberlin and the Massachusetts Institute of Technology, holds her degree of Ph.D from Göttingen and is at present at Clark University.

The only **large gift** received by the College during the last three months is an anonymous gift of \$100,000 towards the endowment fund, which now amounts to \$210,000. S. G. W.

TEACHERS COLLEGE

The broadening of the scope of Teachers College is evidenced in several ways. The number of courses listed under education has significantly increased within two years, from 25 in 1898-1899 to about 50 in the new announcement. These courses are systematically arranged under four heads—history and philosophy of education, educational administration, genetic psychology, and theory and practice of teaching in the elementary and secondary school. To these must be added a large number of courses in subjects allied to education—philosophy, psychology and anthropology. The new courses include a comprehensive course in school administration; an important course upon the sources of the history of education; a

research course on the professional training of teachers at home and abroad; a philosophical practicum on educational classics; a course on methods in nature study; a research course in genetic and comparative psychology; and a course on the development of secondary education. The wider scope of professional training is seen again in the fact that the new courses make larger provision for graduate work and appeal to mature students and to persons occupying the more advanced educational positions. But they appeal also to a larger class; for they offer essential subjects of study for teachers of all grades who wish to secure practical training and a broader outlook on education.

Fully two-thirds of the courses given under the head of education—those in the line of the theory and the practice of teaching—make distinct provision for helpful practical work. The schools of observation and practice—the Horace Mann School and the new Experimental School—constitute a complete school system. All grades of school work from kindergarten to college are included; and the whole is administered by a full corps of teachers, with principals, supervisors, and superintendent, so that students of the College have an opportunity to see in operation and to study at first hand all phases of public school work.

Teachers College emphasizes, furthermore, the importance of a knowledge of the life-period covered by the high school course. A study of adolescence—its conditions, relations, problems, and possibilities—is provided for in the courses in genetic psychology.

The advance of standard is indicated by making the courses for elementary and kindergarten teachers exclusively professional, and by making conditions for admission correspondingly high, these courses now requiring for their prosecution graduation from an approved normal school or two years of college work or an equivalent. Similar changes appear in the departmental courses. The two years of academic work previously included in the undergraduate courses now represent an introductory course, to which students who cannot meet the conditions for admission to the professional courses are referred. The work of these two years is of collegiate grade, but is arranged with special reference to the needs of intending teachers.

The idea seems to have gone forth that Teachers College is just becoming a constituent part of Columbia University. A

careful study of the history of the last two years, however, shows that the College has for some time held that position, and that recent changes are rather in the line of administrative detail. The growing union emphasizes the present attitude of the University toward the professional training of teachers. Many of the Columbia courses offer to Teachers College students extended opportunities for making themselves masters of the subjects which they expect to teach. This fact enforces the advantages to be secured by teachers from the union of a teachers' training college with a great university.

The register of students, which occupies one section of the announcement, shows that the influence of the College is being widely felt. More than four hundred regular students, from all sections of the country, and about eight hundred extension students have been registered during the past year. Over 25 per cent. of the regular students are candidates for the secondary and higher diplomas.

F. W. S.

STUDENT LIFE

Columbia.—Two intercollegiate debates having been held—one with Chicago here and another with Cornell at Ithaca. In the former Columbia upheld the affirmative of the question: The National regulation of corporations tending to become capitalistic monopolies is unwise and inexpedient. After consulting for twenty minutes, the judges returned a unanimous decision for Columbia. We were represented by Loren N. Wood, 1902, law; B. M. L. Ernst, 1902, law, and Melville J. France, 1900. The Cornell debate was held April 27th. Columbia's debaters, none of whom had ever participated in an intercollegiate contest before, were C. A. Baker, 1902, law; R. C. Hull, 1900, and C. H. Tuttle, 1902, law. Cornell won on the negative of the question: President Krüger's ultimatum was justified.

The reorganization of the **Musical Society** has been successfully accomplished. Membership has been thrown open to all who have participated in the Varsity show and to all members of the musical clubs. The musical clubs gave their annual concert at Mendelssohn Hall on the evening of April 25th. The hall was crowded with about eight hundred people. The

concert was really fine and most of the numbers were distinctively Columbia pieces, many songs from the shows of the last three years being given.

The Columbia chess players continued their good record by defeating Princeton on March 10 in a ten-board match. The score was: Columbia, $6\frac{1}{2}$; Princeton, $3\frac{1}{4}$. In the American-British University cable match the British universities were victorious. Owing to the illness of Falk, Sewall was Columbia's only representative. He was beaten by Ellis, of Oxford.

The three societies formed severally in the Romance department, the German department and the department of comparative literature have passed a very successful year. The event of the year in the French Society was the production, in April, together with the French Society of Barnard, of two one-act plays. They were given at the Barnard theatre. The casts were:

L'ÉTÉ DE LA SAINT MARTIN

Briqueville	Philip Coan
Noël	Victor de Beaumont
Madame Lebreton	Miss Spencer
Adrienne	Miss Gruening

LES DEUX SOURDS

Damoiseau	Montgomery Schuyler, Jr.
Placide	Ramsay Hoguet
Boniface	Edwin J. Walter
Eglantine	Miss Newcomb

The *Deutscher Verein* has held numerous successful meetings during the year. Mr. Heinrich Conried, of the Irving Place Theatre, who has taken great interest in the Society, has been elected an honorary member. During the term the Crowners have been addressed by Dr. S. Weir Mitchell, Professor Harry Thurston Peck and Col. Thomas Wentworth Higginson. King's Crown defeated the Verein in a baseball game early in May.

Both *Lit.* and *Morningside* report a considerable falling off this year in literary contributions, probably due to the increased interest in athletics. The most important literary event of the year was the publication early in May, under the auspices of the *Morningside*, of a book of *Imaginary Lectures*, supposed to

be delivered by various prominent professors of the University. In this dainty little volume the manners and foibles of the professors treated are cleverly and playfully parodied with entire lack of vulgarity or malice, and the accompanying caricatures are excellently done.

H. A. K.

Barnard.—Each of the classes has given at least one **social entertainment**, with supper and dancing for its own members, and 1902 has done something of the kind every six weeks through the year.—The undergraduates have given the usual four large teas, followed by dancing. Each class had two members on the committee for each tea, and the success of the affairs has justified the adoption of this scheme in place of the previous one of having each class in turn take entire charge of one tea.—The Junior Ball was a large and very successful dance, reflecting much credit on the committee of arrangements.—The Barnard Dancing Class gave a series of four subscription dances, which were well attended.—Kappa Alpha Theta gave two small dances and a reception, besides its regular meetings.—Kappa Kappa Gamma gave a play, "Timothy Delano's Courtship," at a large afternoon reception, and has had periodic spreads and social meetings.

Each of the college classes has given a **play**, to which the students and many outside friends were invited. 1900 gave "At the Sign of the Cinch," written by a member of the class. Tickets were sold for the benefit of the very needy class treasury and about \$125 was realized. 1901 repeated, for the benefit of the class fund, "Ralph Roister Doister," which had been successfully given last year. 1902 gave two representations of Thackeray's "The Rose and the Ring." 1903 gave a light farce, "Left in Charge."—The *Société Française* joined with the Columbia *Société Française* in four informal social evenings. The two clubs also gave an afternoon reception in honor of the French lecturer of the year, M. de Régnier, and his wife. To this reception a large number of prominent French people in the city were invited, in addition to the University circle.—The *Deutscher Verein* has met fortnightly and has always had some informal entertainment, a *Kaffeeklatsch* or the singing of German songs.

The Women's Graduate Club joined with the Graduate Club of Columbia in giving four social evenings, with readings and a reception. The guests of honor were Mrs. Ruth McEnergy Stuart, Mr. Richard Hovey, Mr. Edwin L. Markham and Dr. Washburn of Roberts College, Constantinople.—**The College Settlements Chapter** gave a very pleasant tea at the Rivington Street Settlement, at which many members and graduates were present. They heard an address from Miss Darling on the needs of the summer home. At a meeting at the College, the Chapter and friends had the privilege of hearing from Mr. Reynolds, of the University Settlement, on some of the problems of the settlement neighborhood.—**The Barnard Botanical Club**, originally formed of Dr. Gregory's students, has added to its number several of the more recent College students. Early in May the Club gave a tea to show work done in the botany department during the year.—**The Associate Alumnae** gave in March a most brilliant musical for the Student's Aid fund. Mrs. Anson Phelps Stokes lent her house, Mme. Schumann-Heinck, M. Plançon and other artists kindly gave their services, and a very considerable amount was realized, to be loaned to students who cannot otherwise get a college education.

The Orchestra, with a membership of fifteen, has practiced regularly through the winter but has given no concert this year. **The Barnard College Chorus** has been organized but will not begin work till next year, when it is hoped that Mr. Hinrichs, leader of the Columbia Glee Club, will take charge. An appropriation of over \$100 has been secured.

The Basket Ball Club has elected as president Elsa Alsberg, in place of Florence Baldwin, who resigned. The Club has, with energetic effort raised the money necessary for securing and preparing an out-of-door field, where it can play in the spring and fall. The field has already been used and proves very satisfactory. The record of the Spring match games is: Teachers College—Barnard, 8-4; Staten Island Academy—Barnard, 1-15.—**The Tennis Club** has a membership of thirty and has just secured a court south of the College.

The Mortarboard has represented very completely the student organizations of the year and has been a financial success.

S. G. W.

COLUMBIA ATHLETIC RECORD

The two conditions that confronted the Athletic Association at the beginning of this season were the lack of an adequate and accessible athletic field and a painful lack of funds. As for the first, there was Columbia Oval, away out in Williamsbridge, a trip to which necessitates a long, devious journey, with three changes of cars. Also there was South Field, opposite the Library, really scarce more than a large patch of lawn and entirely unsatisfactory for regular baseball or track practice. Both the Athletic Executive Committee and the Graduate Advisory Committee saw that our only salvation lay in leasing Manhattan Field for one year, which could be done for \$15,000. Of this sum \$10,000 had to be guaranteed immediately, and of this (such was the enthusiastic spirit shown), half was secured by individual loans among the graduates and half among the undergraduates in three days. But at the April meeting of the General Athletic Committee the treasurer's report revealed a grave financial crisis. The football receipts turned into the general association were less than \$1,500, and of this almost \$1,300 had been expended for various back debts of the crew, etc., so that there remained in the treasury less than \$300.00 to face an immediate indebtedness of \$3,048.65, consequent upon the spring activity in athletics. Moreover, the budgets of the various teams for the season had been fixed as follows:

Crew,	\$9,424.00	Cycle,	800.00
Baseball,	1,395.00	Lacrosse,	460.00
Track,	2,000.00	Total,	\$14,079.00

To relieve the general treasury and somewhat to distribute the responsibility for the debt, it was ruled that each association or team should be responsible for the amount of its particular budget. It was also voted that, "when it appears that the debts or obligations of any athletic interest amount to \$500 more than the receipts, subscriptions or guarantees on hand, then that athletic interest shall not be allowed to incur any further debt until the balance is reduced."

Of course this prohibition fell most heavily on the crew, with its large budget of expenses. It was necessary to raise over \$2,000 in a few days, to pay off debts already accumulated and put the launch *Columbia* in commission. Certain undergraduates particularly interested in the crew thought that the best way to stimulate interest and induce subscriptions was to form a Rowing Club, somewhat on the lines of the defunct Boat Club, with an equal number of graduate and undergraduate governors. Accordingly, a self-appointed committee hastily drew up a constitution, which was adopted by the students in mass meeting on April 11th. This provides for nine graduate and nine undergraduate governors, elected yearly by popular vote, and to elect from their own number a president, a secretary and a treasurer. Every student is a member of the club.

The crews were put on the Harlem March 17, two weeks earlier than usual, and were installed at the Union Boat Club. There were enough men out to form eight crews in all. Dr. Peet was handicapped at first because the launch *Columbia*, on account of lack of funds, could not be put in commission. The Freshman material is much stronger than usual, and by faithful work the Freshmen should be able to make a good showing at Poughkeepsie. The spring regatta was held April 17, the freshman crew defeating both the junior and sophomore eights.

Perhaps in track athletics, more than any other branch of sport, the season opened under the brightest auspices. The first big event, the indoor game, was held at the Eighth Regiment Armory on March 17th. They showed in particular that we have unusually good track material in the two lower classes. Weekes, the football half-back, won the 60-yard dash in 6 2-5 seconds, equalling the indoor record for that event, and Caldwell, 1903, easily ran away from his field in the 880. The mile relay races were very exciting. The Law School team won from P. & S. in the last lap, and in the underclass race the sophomores proved victors in the last relay. On April 21st the sophomore-freshmen games came off, the former winning by a score of 81 points to the latter's 62. Although the ground was heavy, class records were broken in many events. Relay teams were entered in the one- and two-mile events in the University of Pennsylvania games held on April 28th. In the mile we ran against Syracuse and Dartmouth, being beaten by the former merely by a yard in the fast time of 3 minutes, 27 seconds. In the two-mile events our opponents were Princeton and Pennsylvania. Princeton won this in 8 minutes, 5 seconds, breaking the record by 5 seconds. Columbia finished third. At the Columbia spring games college records were broken in the two-mile run and the hammer-throw.

The **Baseball Team** has not made a very remarkable showing thus far. It suffered considerably at the start from the illness of several men. However, the team has not shown much improvement with the continuance of the season.

The **Gymnastic Team** has had a very successful season. The dual meet with Yale was won by 36 points to 18. There were six contests in all. The intercollegiate meet was held in our gymnasium on March 23d. Here again Columbia proved victorious. The standing of the eight competing colleges was: Columbia, 26; Yale, 17; Harvard, 6; N. Y. U., 3; Princeton, 1; Haverford, 1; Cornell, 0. J. de la Fuente, '00 S., won the individual championship. He also won the all-around championship of the University, which was competed for on April 13th. B. Eastmond, 1901, who took second place, will captain the team next year.

The **Cycle Team** began road riding on March 21 and started regular work at Berkeley Oval a few weeks later. The intercollegiate meet will be held at Philadelphia, June 2. An unusually large number of lacrosse men came out for the squad early in the season. There were prospects

for a better team than ever before. Games played have resulted as follows:

Crescent Athletic Club, 19; Columbia, 0.	Hobart, 2; Columbia, 4.
Swarthmore, 14; Columbia, 2.	Cornell, 6; Columbia, 1.
S. I. Athletic Club, 4; Columbia, 4.	Harvard, 3; Columbia, 6.

The Hockey Team finally lost to Yale in the intercollegiate series. The standing of the teams was:

	Won.	Lost.	Tied.
Yale	5	0	0
Columbia	3	2	0
Princeton	0	3	1
Brown	0	3	1

The Fencing Club has not been able to maintain its high record of the past few years. In the Cornell meet the team was defeated by 5 bouts to 4, and it also lost in the intercollegiates. The Swimming Team defeated Yale and Pennsylvania in a 200-yard race in the Sportsman's Show in the Garden. Spring football practice began at South Field on April 5. Forty men will assemble for Fall practice on September 10th, at Branford Point, Conn. W. B. Shoemaker, 1902, has been elected manager, and J. J. Kelly, 1902, assistant manager, of the 1900 eleven.

H. A. K., 1900

THE ALUMNI

The fifth annual meeting of the Alumni Association in Colorado was held at the University Club, Denver, on Saturday, February 3d.

The class of '95 in the college has just set an example, which many other classes might well follow, in publishing a class book containing the history of the class, both individually and collectively, up to the present year. The volume contains a number of illustrations of the Forty-ninth Street grounds, and is remarkably complete and carefully prepared. The editorial committee consisted of C. R. Freeman, C. S. Keyes, W. T. Mason, P. M. Capen, Richmond Weed, G. R. Beach, Dr. F. O. Virgin, and F. Coykendall. The quinquennial dinner of the class was held at "Ye Olde Taverne" in Duane Street on the evening of April 24th.

Lewis F. Pilcher, Ph.B. in Arch., instructor in the history of architecture at the University of Pennsylvania, has been appointed professor of art in Vassar College. He will leave the University of Pennsylvania in June. He studied the classics in Wesleyan and subsequently was graduated from the School of Mines at Columbia. After teaching for a time in that school, he went to the University of Pennsylvania.

George H. Ling, now instructor in mathematics at Wesleyan University, Middletown, Conn., has been appointed professor of mathematics at the Cincinnati University. Prof. Ling is a graduate of the University of Toronto. He was for a time a fellow in mathematics at Columbia, receiving the degree of A.M. here in 1894.

"The death, March 21, of Henry Cohn, assistant professor of German in Northwestern University, has removed one of the most active mediators between German and Anglo-American life, as well as a teacher of remarkable gifts and enthusiasm. He was born in Berlin on February 2, 1847, came to America as a child and was educated at Columbia College in New York. After graduation, he taught German in the School of Mines of the same institution. From 1871 to 1873 he attended the University of Berlin, studying Germanics, orientalia, history and philosophy. In 1875 he founded a private school of languages in New York; then conducted summer-schools in various parts of the country; and, after maintaining a school of languages in Chicago, became connected with Northwestern University in 1893. In addition to the regular duties of his profession, which were performed with remarkable vigor, he founded societies for encouraging general interest in the German language; and from time to time he secured the presence of distinguished German talent in Evanston. For a number of years he had charge of the summer-school of German at Chautauqua."

"John Frederick Gesner, '59—born in 1828, died February 3, 1899—was a son of the late Abraham Gesner, M.D., eminent for his scientific learning and author of several works upon the geology and resources of the British Provinces in North America. John F. Gesner inherited much of his father's ability. He was a chemist of high order, the discoverer of a process for making artificial ice, and a musical composer and dramatic writer of some note."

NEWS OF THE COLLEGE CLASSES

[In this department it is intended to publish items of current interest concerning members of all classes of the College. So far as possible the news for each class will be presented at regular intervals—as often, at least, as once a year. In order that this plan may be carried out effectively—with the result, it is hoped, of preserving college friendships and maintaining loyalty to the College—*graduates are cordially invited to send to the EDITORS news items about members of their own or other classes.*]

1868

Secretary:

B. H. Campbell (A. M., '71; Ph.D.) has been principal of the Columbia Grammar School since 1870. Residing at Elizabeth, N. J., he has been president of the board of trade, an alderman of that city and has been a member of the state board of education since 1894.—H. B. Cornwall (E. M., '67) has been professor of chemistry at Princeton since 1873. During the period he has been a member of various scientific boards, such as the state board of health and the dairy commission, and has recently been elected to the borough council of Princeton.

1876

Secretary: L. O. Ivey, 46 South St.

The annual dinner of the class of '76 was held at "The Arena," on April 19th, and was a very enjoyable affair. Although so few were able to attend, it is but fair to say that we made up in sociability what we lacked in numbers. The gentlemen present were Hon. P. H. Dugro, Jas. A. Renwick, L. C. Raegener, Herman Disler, Aymar Emburg, I. A. Sprague, Theodore Lozier and L. O. Ivey. The committee in charge of the dinner were continued to make arrangements for our dinner next year; and, as next year will be our twenty-fifth since graduation, every possible effort will be made to get all the members together at this time. The committee is composed of Theo. Lozier, I. A. Sprague, Townsend Jones and L. O. Ivey.

1888

Secretary: William R. Powell, 254 West 75th Street.

In the spring of 1899 a challenge was sent to the class of '88 Mines, the holders of the "Alumni Challenge Baseball Toby." The first contest for this trophy had been held the preceding year and had resulted in a victory for '88, Mines, over '86, Arts, by a score of 11 runs to 10. Our challenge was accepted, and the game, which was held on the afternoon of Commencement Day in the field opposite the library, ended in an overwhelming defeat for the Miners, the score being 17 runs to 8 in our favor. Our nine was made up as follows: Sutphen, catcher and captain; Villaverde, pitcher; Goeller, 1st base; Young, 2d base; Baldwin, 3d base; Powell, shortstop; Kane, right field; Moore, centre field; Aitken, left field. After the game the two classes had an informal supper together at the College Tavern. Earlier in the afternoon the annual commencement reunion of the class had been held in room 305, College Hall.

On the 27th of February, 1900, the 16th annual dinner was held at the "Café Boulevard." Among those present were Harper and Probert, neither of whom had been with us for several years.—R. C. Bunzl has returned from Honduras and is at present practicing law in this city.—H. B. Ely has been away from New York for over a year, on account of ill health.—The class has another baby, the little son of H. D. Ewing, born in May, 1898.—Robert Goeller is engaged and expects to be married shortly.—Percy F. Hall was in New York during April, to attend the Ecumenical Conference.—Willard Humphreys has been absent from Princeton during the present academic year on leave. He spent the winter and spring months in southern Italy, Sicily, Egypt and Greece.—Louis E. Mallary is in the First National Bank, Springfield, Mass.—Lawrence Reamer is in charge of the department "The Drama," in *Harper's Weekly*.—George M. Tuttle was married on September 26, 1899, and now resides at 3509 Morgan Street, St. Louis, Mo.—Gerald M. West has returned to New York, and now resides at 330 W. 85th Street.—C. H. Young read a paper at the meeting of the Archaeological Institute of America in December and has since delivered several lectures on

"Ancient Greek Costume," a subject in which he has been carrying on a series of investigations and practical experiments for several years.

1892.

Secretary: Arthur T. Hewlett, 68 Remsen St., Brooklyn.

The Reverend Stephen S. Wise, who has been minister of the Madison Avenue Synagogue in New York City for the past seven years, has accepted a call as Rabbi of the Congregation Beth Israel in Portland, Oregon. Rabbi Wise expects to begin his work in the West in September.

1896

Secretary: W. S. Cherry, M.D., 65 W. 12th St., New York City.

J. R. Atwill is still engaged in missionary work in Kansas; A. W. Parker, in Huddleston, Pa.; W. H. Fitch, in New Mexico.

Among those devoting themselves to the study and practice of law in the city are A. C. Rowe, I. Lepman, E. H. Daly, G. I. Burr, R. H. Bacon, F. M. Livingston, W. C. Shenk and J. Snyder.—C. B. Kilmer is practicing in Saratoga, N. Y.—M. H. Dalberg, while practicing law, is perfecting politics as Tammany captain in his district.—J. M. Proskauer, coached the Columbia debating team which defeated the University of Chicago team at Carnegie Hall in March. He and J. Rosenberg ('95) have formed a partnership for the practice of law at 19 Liberty St.

E. W. Gould, M. D., graduated last spring from P. & S. second in his class, receiving the "Harsen Prize" of three hundred dollars. He is at present on the house staff of St. Luke's Hospital.—E. Beer, M.D., and W. S. Cherry, M.D., also graduated in '99 from P. & S.; the former is on the house staff in Mt. Sinai Hospital, and the latter on the house staff of St. Vincent's Hospital.—R. H. Halsey, R. Weil, C. Alsberg, C. Smith, F. Weisse, and H. L. Celler all expect to graduate from P. & S. this spring. H. L. Celler has received an appointment in Mt. Sinai Hospital, R. Weil in the German Hospital and F. S. Veisse in Roosevelt Hospital.—Annitape Bradley, having received his bachelor's degree at Oxford, has returned home and has completed his second year at P. & S.

S. S. Seward is studying literature at Oxford. During his recreation hours he has turned to rowing and has already "won his oar."—J. C. Levi is still abroad, pursuing his studies at the Beaux Arts, Paris.—W. C. Kretz is devoting himself to the study of astronomy, physics and mathematics. He received his degree of Doctor of Philosophy at Columbia last spring.—D. W. Armstrong is engaged in business pursuits in Chicago. He was married about a year ago.—The Benedict list of the class now includes D. W. Armstrong, C. S. Adams, W. S. Cherry, W. H. Hayes, C. B. Kilmer, J. W. Russell and W. C. Shoup.

The class dinner was held at "The Arena" last December. It was very well attended and included many of the early members of the class. Among whom were: N. I. Bijur, M. H. Dalberg, C. E. Fay, T. H. Joseph, C. W. Kent, A. G. Lesley, E. Pfeffer and S. Schwab.

SUMMARIES OF UNIVERSITY LEGISLATION

THE TRUSTEES. MARCH MEETING

Mr. W. C. Schermerhorn and Mr. Smith were elected members of the Committee on Buildings and Grounds, in place of Mr. Bronson and Mr. Parsons, resigned.

The President reported that he had received from Mr. Isaac N. Seligman, the treasurer of the Carl Schurz Fund, a check for \$20,011.79, now constituting the fund, with a list of the contributors. The gift was acknowledged and it was voted,

That \$10,000 be applied to the establishment of the Carl Schurz Fellowship in German; and \$10,000 to the establishment of the Carl Schurz Fund for the Increase of the Library, the income to be devoted to the purchase of books, maps, pamphlets and the like in the field of the Germanic languages and literatures, and that the balance be placed to the credit of the income of the Library Fund.

It was also resolved,

That the Trustees take pleasure in acknowledging the receipt of the communication from the executors of the will of the late Dorman B. Eaton, informing them of the bequest to the Trustees, and that, if approved by the family and executors of the said Dorman B. Eaton, they will designate a chair in the University, when the bequest shall be received, by the name and in honor of the testator.

A letter was received from Mrs. Robert Goelet, on behalf of herself and her children, offering to erect a bronze statue representing "Alma Mater," to be placed upon the pedestal in front of the Library and to bear the inscription, "In Memory of Robert Goelet, Class of 1860." The offer was accepted with thanks; and it was referred to the Committee on Buildings and Grounds, in consultation with the Committee on Art, to consider and report upon the design for the statue, when submitted.

A vote of thanks was tendered to Mr. John Stanton for a gift of \$500 towards a special fund for the departments of mining and metallurgy, and the Treasurer was authorized to accept this and further contributions to the same fund for the joint use of the said departments.

A vote of thanks was also tendered to the Class of '74, Columbia College, for its gift to the University of the clock surmounting the central book-case in the main reading-room of the Library; to Mr. Wm. Barclay Parsons, for a gift to the Library of a series of valuable Chinese books; also to Mrs. P. A. Malleon, for a gift to the department of astronomy, in the name of the late Mrs. Manning M. Knapp as a memorial of her son, Joseph Mattison Knapp, Columbia College, Class of '78, of an eight-inch object glass for a telescope, with a photographic lens; also to Mr. William Underhill Moore, Class of 1900, for a statuette of the late Charles William Hackley, S.T.D., once a member of the Faculty of the College; also to the Crosby Steam Gauge and Valve Company and the Abner Doble Company for gifts to the department of mechanical engineering.

The Chairman of the Finance Committee reported that, under resolution of the Board adopted June 5th, 1899, it was referred to the Finance Committee, with power, to determine the disposition of a gift of \$1,500 from Alexander Coles; that the College had also received a legacy of \$500 from John J. Jenkins, deceased; and that, in exercise of the above powers, it had been resolved to consolidate into one account, to be known as the "Law-Book Trust Fund," the Simson, McKeon, Coles and Jenkins gifts, the income to be applied in purchase of law books. It was resolved,

That the action of the Finance Committee as above stated be approved, ratified and adopted as the action of this Board.

An additional appropriation of \$500 was voted for the *University Quarterly* for the current fiscal year.

Upon the nomination of the Dean of Barnard College, approved by the Trustees of the College and the President of the University, William P. Trent, M.A., LL.D., was appointed professor of English literature in Barnard College, from and after July 1st, 1900, for three years or during the pleasure of the Trustees.

THE TRUSTEES. APRIL MEETING

The President announced the death of Mr. Frederic Bronson, on March 29th, at Palermo, Sicily.

An agreement to take the place of the existing agreement with Teachers College was submitted by the Committee on Education, having been approved by the Executive Committee of Teachers College, and was approved by the Trustees, and ordered to be executed, to take effect on July 1st. Under the new agreement, the Dean of Teachers College will have a seat in the University Council with a vote on all questions, and, whenever the College shall have ten professors in its Faculty, they shall have the right to elect a representative in the Council. After July 1st, all degrees and diplomas will be conferred on graduates and qualified students of Teachers College at the Commencement of the University.

An agreement modifying the agreement of December 31st, 1896, with Barnard College, in regard to the Curtis Scholarships, having been approved by the Executive Committee of Barnard College, was submitted by the Committee on Education and was also approved; the effect of the modifications being to transfer the Curtis Scholarships from Barnard College to the University. A statute was adopted, providing that after July 1st, these scholarships, which are designated the "Curtis Scholarships of Barnard College," shall be awarded to women by the University Council in the same manner as University scholarships.

The resolution adopted at the last meeting, establishing the Carl Schurz Fund for the increase of the Library, was amended to read:

That there be, and hereby is, established the Carl Schurz Fund for the Increase of the Library, to consist of \$10,000, the income of which shall be used

for the purchase of books, maps, pamphlets and the like, in the field of the German Language and Literature.

A vote of thanks was tendered to the London & Northwestern Railway Company, of England, for a gift to the department of mechanical engineering of forty-eight photographs illustrating the practice of the company in its locomotive and other mechanical departments.

A communication was received from the United States Daughters of 1812, Empire State Society, formally presenting to the University the bronze tablet placed by the Society on the easterly wall of Fayerweather Hall in commemoration of the defences of the War of 1812.

Chapter XXI, of the Statutes, was amended by adding Section 21, establishing the Carl Schurz Fellowship, and by amending Section 4, relating to the Barnard Fellowship so as to render graduates of the School of Pure Science eligible to appointment.

The title of Dr. Abraham Jacobi was changed from clinical professor of the diseases of children to professor of the diseases of children, from and after May 5th, 1900.—Dr. James C. Egbert, now adjunct professor of Latin, was promoted to the rank of professor, and his title was changed to professor of Roman archaeology and epigraphy.

The President reported the appointment by the Faculty of Political Science of George James Bayles, Ph.D., as prize lecturer on ecclesiastical organization and government in the United States.—Mortimer L. Earle, Ph.D., was appointed professor of classical philology in Barnard College from and after July 1st, 1900, for three years, or during the pleasure of the Trustees.

THE TRUSTEES. MAY MEETING

The report of the Finance Committee for the fiscal year ending June 30, 1901, which was presented at the last meeting, was considered and the resolutions and schedules appended were adopted, with some amendments.

As there were two vacancies in the Board, caused by the death of Mr. Vanderbilt and Mr. Bronson, a ballot was taken and Francis Sedgwick Bangs and Benjamin Aymer Sands were elected to fill the vacancies.

Mr. Parsons was elected a member of the Committee on Finance, to succeed Mr. Bronson, deceased.

Amendments to the by-laws were adopted, reorganizing the Committee on Education, with the President as an *ex officio* member, and providing for the submission of an annual estimate by the Committee on Education as to the educational administration and work of the University. To fill the vacancies in the Committee on Education, created by the adoption of the amended by-law, the following Trustees were elected members of the Committee: Rev. Dr. Coe, Dr. Draper, Mr. Mitchell, Mr. Parsons and Mr. Pine.

The President announced that the National Academy of Sciences had voted to award the Barnard Medal for meritorious service to science to

Professor Wilhelm Conrad Röntgen, and a resolution was adopted, providing that the medal be awarded in accordance with the recommendation of the Academy of Sciences.

The President reported a gift of \$250 from Edgar J. Nathan, Law, '81; also a gift from the B. F. Sturtevant Co. of a centrifugal fan; a contribution by G. A. Suter, E.M., Mines, '83, for installing the same; also gifts from the Allentown Rolling Mills, and from the Union Boiler Tube Cleaner Co.—all of which were acknowledged by votes of thanks.

It was voted that the University become a member of the Association of American Universities, recently organized at Chicago for the purpose of conference and coöperation.

Permission was granted to friends of the late Hamilton Y. Castner, formerly a student in the School of Mines, to erect a bronze tablet to his memory in the University buildings, in recognition of his distinguished services as a chemist.

The President submitted the resignation of Prof. Pierre de Peyster Ricketts, E.M., Ph.D., as professor of analytical chemistry and assaying, to take effect June 30, 1900, on account of ill health. The resignation was accepted, and it was resolved,

That, in accepting the resignation of Professor Ricketts after 29 years of continuous service, the Trustees take pleasure in making record of his long and faithful service, and request the President to convey to Professor Ricketts a suitable expression of their regard and esteem.

The office of professor of analytical chemistry and assaying was abolished from and after July 1, 1900, and there was established a lectureship in analytical chemistry for the next academic year, Henry Clapp Sherman, Ph.D., being appointed thereto.

The office of assistant in analytical chemistry was also abolished and a lectureship was substituted, to which Dr. Jouet was appointed.

The President presented an opinion, rendered by Hon. William G. Choate, on the charter rights of the corporation, and it was ordered that the same be printed in pamphlet form for the use of the Trustees.

Professor Edmund B. Wilson was continued as head of the department of zoölogy from and after July 1, 1900.—Herbert G. Lord, A.M., was appointed professor of philosophy for a term of three years, from July 1, 1900, or during the pleasure of the Trustees.

The following additional appointments were made (but re-appointments without change of title are omitted from the list):

Instructors

William T. Brewster, A.M., English; * George C. D. Odell, Ph.D., English; Louis A. Loiseaux, romance languages and literatures; Cassius J. Keyser, A.M., mathematics; Wray A. Bentley, B.S., metallurgy; Frank C. Hooper, Met.E., mining; Franklin A. Norman, M.D., obstetrics;

* In Columbia College and also in Barnard College.

Francis C. Wood, M.D., clinical pathology; Herbert M. Richards, S.D., botany; † Margaret E. Maltby, Ph.D., chemistry; † Charles Knapp, Ph.D., classical philology; † Henry J. Burchell, Jr., A.M., classical philology; † Henry E. Crampton, Ph.D., zoölogy.†

Tutors

William R. Shepherd, history; Philip G. Carleton, A.B., English; Joel E. Spingarn, Ph.D., comparative literature; Rudolf Tombo, Jr., A.M., Germanic languages and literatures; Daniel Jordan, B.S., Pd.B., Romance languages and literatures; George A. Goodell, A.M., chemistry; Henry B. Mitchell, E.E., mathematics; Louise B. Dunn, botany; † Rudolph Tombo, Ph.D., German; † Edward Kasner, Ph.D., mathematics; † Frederic R. Bailey, M.D., normal histology; John H. Larkin, M.D., pathology.

Lecturers

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*In Columbia College and also in Barnard College.

†In Barnard College only.

UNIVERSITY STATISTICS

COLLEGE GRADUATES AT EASTERN UNIVERSITIES

THIS article had its origin in the desire of the writer to ascertain how the student bodies of the university departments of our leading Eastern universities compare with one another, as regards the total number of college graduates in attendance at each, and to determine to what extent each University is dependent upon its own college for its support. The universities selected for this purpose are Harvard, Yale, Pennsylvania and Columbia. It was my intention to include Cornell in the list, but unfortunately the Cornell catalogue did not contain the desired information. The following figures have been compiled from the university catalogues for 1899-1900. Different methods of registration have, as usual in such work, caused considerable difficulty. In order to do justice to all concerned, I have found it necessary to omit attendants upon the teachers' courses at Yale and Pennsylvania, the auditors and the extension students of Teachers College at Columbia, and the auditors registered in the graduate school of Pennsylvania.

The following table is doubly interesting when compared with the statistics compiled by Professor Carpenter last year; but, to appreciate the results, a few words of explanation are perhaps necessary. At Harvard, Yale and Pennsylvania, graduate students in education register in the graduate school, but at Columbia the majority of such students register at Teachers College. It has, therefore, seemed but fair to include the graduate students of Teachers College in Columbia's graduate schools.

Graduate Schools at	Total number of Students	College Graduates	From its Own College	From other Colleges
Harvard.	366	357	192	165
Yale.	283	279	146	133
Pennsylvania.	144	138	35	103
Columbia.	494	476	48	428

The above figures show that Columbia has the largest graduate school, and that the number of college graduates of other institutions in attendance is greater than that at the Harvard, the Yale and the Pennsylvania graduate schools combined. When compared with the registration of last year, Harvard and Pennsylvania show but a very slight increase in their graduate schools, while Yale has an increase amounting to 16%; but remarkable changes have occurred, as the following table shows, in the Columbia "non-professional" graduate schools:

Faculty	No. Students 1898-1899	No. Students 1899-1900	College Graduates 1898-1899	College Graduates 1899-1900
Philosophy, Pure Science and Political Science .	252	303	200	285
Women	66	77	65	77
Teachers College	51	114	51	114
Total	369	494	316	476

These figures show that, although Columbia lost 35 non-college-graduates this year, her graduate schools are larger by 125. In other words, there are 160 more graduates in attendance this year than last.

The attendance of college graduates in the various graduate and professional schools of these universities reveal equally significant tendencies.

Graduate and Professional Schools	Number of Students				Number of College Graduates			
	H	Y	P	C	H	Y	P	C
Departments								
Law	613	195	312	379	556	63	125	285
Medicine	558	135	682	706	275	30	148	812
Scientific	495	571	306	488	17	77	0	74
Other professional schools .	209	297	549	281	39	99	48	0
Graduate school	366	283	144	404	357	279	138	476
Double registration	12	188	10	0	10	82	?	—
Net total	2229	1293	1983	2438	1234	466	459	1007
Graduate and Professional Schools	From its own College				From other Colleges			
	H	Y	P	C	H	Y	P	C
Departments								
Law	235	37	28	31	321	26	97	204
Medicine	125	22	19	16	150	8	129	206
Scientific	9	43	—	6	8	34	—	68
Other professional schools .	12	20	11	—	27	79	37	—
Graduate school	192	146	35	48	165	133	103	428
Double registration	3	46	?	—	7	36	?	—
Net Total	570	222	93	101	664	244	366	906

These figures seem to show :

- (1) Columbia has the largest body of graduate and professional students.
- (2) Harvard has the largest number of college graduates within the graduate and professional schools.
- (3) Pennsylvania and Columbia are at a great disadvantage because of the small size of their colleges.
- (4) Notwithstanding this disadvantage, Columbia has but 140 less college graduates than Harvard ; and, if the same rate of increase continues, in two or three years will pass Harvard.
- (5) Columbia draws more graduates of other colleges than Harvard and Yale combined.

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Columbia University includes both a college and a university in the strict sense of the words. The college is Columbia College, founded in 1754 as King's College. The university consists of the Faculties of Law, Medicine, Philosophy, Political Science, Pure Science and Applied Science. Teachers College, a professional school for teachers, while financially an independent corporation, is also a part of the university. As a professional school it is conducted by its own faculty. From the point of view of the university, its courses in education that lead to a degree fall under the Faculty of Philosophy.

The point of contact between the college and the university is the senior year of the College, during which year students in the college pursue their studies, with the consent of the college faculty, under one or more of the faculties of the university.

Each school is under the charge of its own faculties, except that the Schools of Mines, Chemistry, Engineering and Architecture are under the charge of the Faculty of Applied Science. For the better conduct of the strictly university work, as well as of the whole institution, a university council has been established.

I. THE COLLEGE.

The college offers a course of four years, leading to the degree of Bachelor of Arts. Candidates for admission to the college must be at least fifteen years of age, and pass an examination on prescribed subjects, the particulars concerning which may be found in the annual circular of information.

II. THE UNIVERSITY.

In a technical sense, the Faculties of Law, Medicine, Philosophy, Political Science, Pure Science and Applied Science, taken together, constitute the University. These faculties offer advanced courses of study and investigation, respectively, in (a) private or municipal law, (b) medicine, (c) philosophy, philology and letters, (d) history, economics and public law, (e) mathematics and natural science, and (f) applied science. Courses of study under all of these faculties are open to members of the senior class in the college and also to all students who have successfully pursued an equivalent course of undergraduate study to the close of the junior year. These courses lead, through the bachelor's degree, to the university degrees of Master of Arts and Doctor of Philosophy. The degree of Master of Laws is also conferred for advanced work in law done under the Faculties of Law and Political Science together.

III. THE PROFESSIONAL SCHOOLS

The Faculties of Law, Medicine and Applied Science, conduct respectively the professional schools of Law, Medicine, and Mines, Chemistry, Engineering and Architecture, to which students are admitted as candidates for professional degrees on terms prescribed by the faculties

concerned. The faculty of Teachers College conducts professional courses for teachers, that lead to the diploma of Teachers College.

1. The School of Law, established in 1858, offers a course of three years in the principles and practice of private and public law, leading to the degree of Bachelor of Laws.

2. The College of Physicians and Surgeons, founded in 1807, offers a course of four years, in the principles and practice of medicine and surgery, leading to the degree of Doctor of Medicine.

3. The School of Mines, established in 1864, offers courses of study, each of four years, leading to a professional degree, in mining engineering and in metallurgy.

4. The Schools of Chemistry, Engineering and Architecture, set off from the School of Mines in 1896, offer respectively, courses of study, each of four years, leading to an appropriate professional degree, in analytical and applied chemistry; in civil, sanitary, electrical and mechanical engineering; and in architecture.

5. Teachers College, founded in 1888 and chartered in 1889, was included in the University in 1898. It offers courses of study, each of four years, leading to the college diploma, for secondary, elementary and kindergarten teachers. It also offers courses of two years, leading to a departmental diploma in Art, Domestic Science, Domestic Art and Manual Training. Certain of its courses are accepted by Columbia University, and may be taken by students of the university in partial fulfillment of the requirements for the degrees of Bachelor of Arts, Master of Arts and Doctor of Philosophy, without extra charge.

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